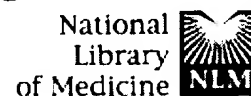


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<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>			
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L15	L14 AND human insulin precursor	2	L15
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L13	L12 AND human insulin precursor	14	L13
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L10	L9 AND chaotropic	82	L10
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L5	L4 AND mercaptan	1	L5
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☐ 1: Wang HC, Xia Y, He Y.

The Rapid Identification of Protein Through Its Amino Acid Composition.

Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 1996;28(3):293-299.

PMID: 12237685 [PubMed - as supplied by publisher]

☐ 2: Feng YM, Zhang BY, Zhang YS, Hiroshi F.

Secretory Expression of Porcine Insulin Precursor in Kluyveromyces lactis and Human Insulin.

Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 1997;29(2):129-134.

PMID: 12219217 [PubMed - as supplied by publisher]

☐ 3: Brzozowski AM, Dodson EJ, Dodson GG, Murshudov GN, Verma C, Turkenburg JP, de Bree J, Dauter Z.

Structural origins of the functional divergence of human insulin-like growth factor Biochemistry. 2002 Jul 30;41(30):9389-97.

PMID: 12135360 [PubMed - indexed for MEDLINE]

☐ 4: Wang Y, Liang ZH, Zhang YS, Cui DF, Feng YM.

Secretory Expression of Human Insulin in Methylotrophic Yeast Pichia pastoris

Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 1999;31(5):587-589.

PMID: 12114976 [PubMed - as supplied by publisher]

☐ 5: Tan DS, Cook A, Chew SL.

Nucleolar localization of an isoform of the IGF-I precursor.

BMC Cell Biol. 2002 Jul 2;3(1):17.

PMID: 12095420 [PubMed - indexed for MEDLINE]

☐ 6: Zhang H, Chen Y, Feng YM.

A Recombinant Monomeric Human Insulin Mutant with Resistance to Trypsin Characterization.

Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 2000;32(6):633-636.

PMID: 12058177 [PubMed - as supplied by publisher]

☐ 7: Soria B.

In-vitro differentiation of pancreatic beta-cells.

Differentiation. 2001 Oct;68(4-5):205-19.

PMID: 11776473 [PubMed - indexed for MEDLINE]

☐ 8: Nielsen L, Frokjaer S, Brange J, Uversky VN, Fink AL.

Probing the mechanism of insulin fibril formation with insulin mutants.

Biochemistry. 2001 Jul 27;40(28):8397-409.

PMID: 11444987 [PubMed - indexed for MEDLINE]

☐ 9: Yin D, Tang JG.

Gene therapy for streptozotocin-induced diabetic mice by electroporational transfection of insulin precursor DNA into skeletal muscle in vivo.

FEBS Lett. 2001 Apr 20;495(1-2):16-20.
PMID: 11322940 [PubMed - indexed for MEDLINE]

10: Cui DF, Li MY, Zhang YS, Feng YM.

Monomeric destetrapeptide human insulin from a precursor expressed in *Saccharomyces cerevisiae*.
J Pept Res. 2001 Mar;57(3):188-92.
PMID: 11298919 [PubMed - indexed for MEDLINE]

11: Wang Y, Liang ZH, Zhang YS, Yao SY, Xu YG, Tang YH, Zhu SQ, Cui DF, Feng YM.

Human insulin from a precursor overexpressed in the methylotrophic yeast *Pichia pastoris*: a procedure for purifying the expression product.
Biotechnol Bioeng. 2001 Apr 5;73(1):74-9.
PMID: 11255154 [PubMed - indexed for MEDLINE]

12: Tikhonov RV, Pechenov SE, Belacheu IA, Yakimov SA, Klyushnichenko VE, Boldireva EF, Korobko VG, Tunes H, Thiemann JE, Vilela L, Wulfson AN.

Recombinant human insulin. VIII. Isolation of fusion protein--S-sulfonate, biotinylation of human insulin, from the biomass of transformed *Escherichia coli* cells.
Protein Expr Purif. 2001 Feb;21(1):176-82.
PMID: 11162404 [PubMed - indexed for MEDLINE]

13: Kjeldsen T.

Yeast secretory expression of insulin precursors.
Appl Microbiol Biotechnol. 2000 Sep;54(3):277-86. Review.
PMID: 11030562 [PubMed - indexed for MEDLINE]

14: Zhou X, Tsuda S, Bala N, Arakaki RF.

Efficient translocation and processing with *Xenopus* egg extracts of proteins synthesized in reticulocyte lysate.
In Vitro Cell Dev Biol Anim. 2000 May;36(5):293-8.
PMID: 10937832 [PubMed - indexed for MEDLINE]

15: Koh M, Hanagata H, Ebisu S, Morihara K, Takagi H.

Use of *Bacillus brevis* for synthesis and secretion of Des-B30 single-chain human insulin.
Biosci Biotechnol Biochem. 2000 May;64(5):1079-81.
PMID: 10879487 [PubMed - indexed for MEDLINE]

16: Sproule K, Morrill P, Pearson JC, Burton SJ, Hejnaes KR, Valore H, Ludvigsen S, Lowe CR.

New strategy for the design of ligands for the purification of pharmaceutical proteins by ion exchange chromatography.
J Chromatogr B Biomed Sci Appl. 2000 Mar 31;740(1):17-33.
PMID: 10798291 [PubMed - indexed for MEDLINE]

17: Tsuda S, Kaihara M, Zhou X, Britos D, Arakaki R.

The in vitro synthesized and processed human insulin receptor precursor binds insulin.
FEBS Lett. 1999 Aug 20;457(1):13-7.
PMID: 10486554 [PubMed - indexed for MEDLINE]

18: Sucic JF, Moehring JM, Inocencio NM, Luchini JW, Moehring TJ.

Endoprotease PACE4 is Ca²⁺-dependent and temperature-sensitive and can partially rescue the growth phenotype of a furin-deficient cell strain.
Biochem J. 1999 May 1;339 (Pt 3):639-47.
PMID: 10215603 [PubMed - indexed for MEDLINE]

19: Kjeldsen T, Pettersson AF, Hach M.

Secretory expression and characterization of insulin in *Pichia pastoris*.
Biotechnol Appl Biochem. 1999 Feb;29 (Pt 1):79-86.
PMID: 9889087 [PubMed - indexed for MEDLINE]

20:Schloot NC, Willemen S, Duinkerken G, de Vries RR, Roep BO.



Cloned T cells from a recent onset IDDM patient reactive with insulin B-chain
J Autoimmun. 1998 Apr;11(2):169-75.
PMID: 9650096 [PubMed - indexed for MEDLINE]

21:Chang SG, Kim DY, Choi KD, Shin JM, Shin HC.



Human insulin production from a novel mini-proinsulin which has high receptor
Biochem J. 1998 Feb 1;329 (Pt 3):631-5.
PMID: 9445392 [PubMed - indexed for MEDLINE]

22:Zhang Y, Hu H, Cai R, Feng Y, Zhu S, He Q, Tang Y, Xu M, Xu Y, Zhang X, Liu B, Liang Z



Secretory expression of a single-chain insulin precursor in yeast and its conversion
Sci China C Life Sci. 1996 Jun;39(3):225-33.
PMID: 8760451 [PubMed - indexed for MEDLINE]

23:Goes N, Urmson J, Vincent D, Ramassar V, Halloran PF.



Effect of recombinant human insulin-like growth factor-1 on the inflammatory
injury.
J Am Soc Nephrol. 1996 May;7(5):710-20.
PMID: 8738806 [PubMed - indexed for MEDLINE]

24:Kobayashi K, Agrawal K, Jackson IT, Vega JB.



The effect of insulin-like growth factor 1 on craniofacial bone healing.
Plast Reconstr Surg. 1996 May;97(6):1129-35.
PMID: 8628795 [PubMed - indexed for MEDLINE]

25:Ravazzola M, Halban PA, Orci L.



Inositol 1,4,5-trisphosphate receptor subtype 3 in pancreatic islet cell secretory
Proc Natl Acad Sci U S A. 1996 Apr 2;93(7):2745-8.
PMID: 8610112 [PubMed - indexed for MEDLINE]

26:Sun H, Tang J, Hu M.



Preparation of Tyr-C-peptide from genetically altered human insulin precursor
Appl Biochem Biotechnol. 1995 Dec;55(3):167-74.
PMID: 8579343 [PubMed - indexed for MEDLINE]

27:Chen JQ, Zhang HT, Hu MH, Tang JG.



Production of human insulin in an E. coli system with Met-Lys-human proinsulin
precursor.
Appl Biochem Biotechnol. 1995 Oct;55(1):5-15.
PMID: 7486987 [PubMed - indexed for MEDLINE]

28:Zhang BY, Zhang YS, Cai RR, Feng YM, He QB.



Recombinant A17 Lys human insulin: purification and characterization.
Biochem Mol Biol Int. 1995 Aug;36(5):1079-85.
PMID: 7581003 [PubMed - indexed for MEDLINE]

29:Kozlov DG, Pahl N, Efremov BD, Peters L, Wambut R, Karpychev IV, Eldarov MA, Benevise SV.



Host cell properties and external pH affect proinsulin production by Saccharomyces
Yeast. 1995 Jun 30;11(8):713-24.
PMID: 7668041 [PubMed - indexed for MEDLINE]

30:Ichiyoshi Y, Zhou M, Casali P



A human anti-insulin IgG autoantibody apparently arises through clonal selection
specific "germ-line" natural antibody template. Analysis by V gene segment recombination
directed mutagenesis.

J Immunol. 1995 Jan 1;154(1):226-38.
PMID: 7995943 [PubMed - indexed for MEDLINE]

31:Maachi F, Straczek J, Jacob C, Belleville F, Nabet P.

A seric low molecular weight factor modulates IGFs effects on chick cartilage
Life Sci. 1995;56(25):2273-84.
PMID: 7791514 [PubMed - indexed for MEDLINE]

32:Tsarfaty G, Longo DL, Murphy WJ.

Human insulin-like growth factor I exerts hematopoietic growth-promoting ef
administration.
Exp Hematol. 1994 Dec;22(13):1273-7.
PMID: 7957713 [PubMed - indexed for MEDLINE]

33:Jui HY, Suzuki Y, Accili D, Taylor SI.

Expression of a cDNA encoding the human insulin receptor-related receptor.
J Biol Chem. 1994 Sep 2;269(35):22446-52.
PMID: 8071374 [PubMed - indexed for MEDLINE]

34:Stefani M, Caselli A, Bucciantini M, Pazzagli L, Dolfi F, Camici G, Manao G, Ramponi G.

Dephosphorylation of tyrosine phosphorylated synthetic peptides by rat liver p
phosphatase isoenzymes.
FEBS Lett. 1993 Jul 12;326(1-3):131-4.
PMID: 7686862 [PubMed - indexed for MEDLINE]

35:Chaudhuri B, Latham SE, Stephan C.

A mutant Kex2 enzyme with a C-terminal HDEL sequence releases correctly 1
like growth factor-1 from a precursor accumulated in the yeast endoplasmic re
Eur J Biochem. 1992 Dec 15;210(3):811-22.
PMID: 1483466 [PubMed - indexed for MEDLINE]

36:Frattali AL, Treadway JL, Pessin JE.

Transmembrane signaling by the human insulin receptor kinase. Relationship
beta subunit trans- and cis-autophosphorylation and substrate kinase activatio
J Biol Chem. 1992 Sep 25;267(27):19521-8.
PMID: 1326556 [PubMed - indexed for MEDLINE]

37:Chaudhuri B, Stephan C.

A modified Kex2 enzyme retained in the endoplasmic reticulum prevents disu
of recombinant human insulin-like growth factor-1 secreted from yeast.
FEBS Lett. 1992 Jun 8;304(1):41-5.
PMID: 1618297 [PubMed - indexed for MEDLINE]

38:Kellerer M, Lammers R, Ermel B, Tippmer S, Vogt B, Obermaier-Kusser B, Ullrich A, Harin

Distinct alpha-subunit structures of human insulin receptor A and B variants d
tyrosine kinase activities.
Biochemistry. 1992 May 19;31(19):4588-96.
PMID: 1374639 [PubMed - indexed for MEDLINE]

39:Hudgins WR, Hampton B, Burgess WH, Perdue JF.

The identification of O-glycosylated precursors of insulin-like growth factor II
J Biol Chem. 1992 Apr 25;267(12):8153-60.
PMID: 1569071 [PubMed - indexed for MEDLINE]

40:Chaudhuri B, Latham SE, Helliwell SB, Seeboth P.

A novel Kex2 enzyme can process the proregion of the yeast alpha-factor lead
reticulum instead of in the Golgi.
Biochem Biophys Res Commun. 1992 Feb 28;183(1):212-9.

PMID: 1543492 [PubMed - indexed for MEDLINE]

41: Macaulay SL, Clark S, Larkins RG.

Correlation of insulin receptor level with both insulin action and breakdown of mediator precursor; studies in CHO cell-lines transfected with insulin receptor
Biochim Biophys Acta. 1992 Feb 19;1134(1):53-60.
PMID: 1543757 [PubMed - indexed for MEDLINE]

42: Heath WF, Belagaje RM, Brooke GS, Chance RE, Hoffmann JA, Long HB, Reams SG, Rounsley C, Shaw WN, Slicker LJ, et al.

(A-C-B) human proinsulin, a novel insulin agonist and intermediate in the synthesis of human insulin.
J Biol Chem. 1992 Jan 5;267(1):419-25.
PMID: 1730606 [PubMed - indexed for MEDLINE]

43: Perdue JF, LeBon TR, Kato J, Hampton B, Fujita-Yamaguchi Y.

Binding specificities and transducing function of the different molecular weight isoforms of insulin-like growth factor-II (IGF-II) on IGF-I receptors.
Endocrinology. 1991 Dec;129(6):3101-8.
PMID: 1659523 [PubMed - indexed for MEDLINE]

44: Steube K, Chaudhuri B, Marki W, Merryweather JP, Heim J.

Alpha-factor-leader-directed secretion of recombinant human-insulin-like growth factor in *Saccharomyces cerevisiae*. Precursor formation and processing in the yeast secretory pathway.
Eur J Biochem. 1991 Jun 15;198(3):651-7.
PMID: 2050146 [PubMed - indexed for MEDLINE]

45: Sisson JF, Ellis L.

Biosynthesis of the precursor of a soluble human insulin receptor ectodomain infected with a recombinant baculovirus.
Biochem Biophys Res Commun. 1991 Jun 14;177(2):764-70.
PMID: 2049099 [PubMed - indexed for MEDLINE]

46: Mroczkowski B.

Expression of epidermal growth factor precursor cDNA in animal cells.
Methods Enzymol. 1991;198:175-85.
PMID: 1649948 [PubMed - indexed for MEDLINE]

47: Tobin G, Yee D, Brunner N, Rotwein P.

A novel human insulin-like growth factor I messenger RNA is expressed in neonatal rat liver.
Mol Endocrinol. 1990 Dec;4(12):1914-20.
PMID: 2082190 [PubMed - indexed for MEDLINE]

48: Bovenberg WA, Dauwerse JG, Pospiech HM, Van Buul-Offers SC, Van den Brande JL, Susskind MM.

Expression of recombinant human insulin-like growth factor I in mammalian cells.
Mol Cell Endocrinol. 1990 Nov 12;74(1):45-59.
PMID: 2282979 [PubMed - indexed for MEDLINE]

49: Yoshimasa Y, Paul JJ, Whittaker J, Steiner DF.

Effects of amino acid replacements within the tetrabasic cleavage site on the processing of insulin receptor precursor expressed in Chinese hamster ovary cells.
J Biol Chem. 1990 Oct 5;265(28):17230-7.
PMID: 2211623 [PubMed - indexed for MEDLINE]

50: Morihara K.

Enzymatic semisynthesis of human insulin: an update.
J Mol Recognit. 1990 Oct-Dec;3(5-6):181-6. Review.
PMID: 2096884 [PubMed - indexed for MEDLINE]

51:Goldstein BJ, Dudley AL.

Related Articles, Nucle



The rat insulin receptor: primary structure and conservation of tissue-specific RNA splicing.

Mol Endocrinol. 1990 Feb;4(2):235-44.

PMID: 2330003 [PubMed - indexed for MEDLINE]

52:Villalba M, Alvarez JF, Russell DS, Mato JM, Rosen OM.

Re



Hydrolysis of glycosyl-phosphatidylinositol in response to insulin is reduced in deficient insulin receptors.

Growth Factors. 1990;2(2-3):91-7.

PMID: 2160261 [PubMed - indexed for MEDLINE]

53:Whiteley PJ, Lake JP, Selden RF, Kapp JA.

Re



Tolerance induced by physiological levels of secreted proteins in transgenic mice with insulin.

J Clin Invest. 1989 Nov;84(5):1550-4.

PMID: 2681269 [PubMed - indexed for MEDLINE]

54:Ehrlich HJ, Jaskunas SR, Grinnell BW, Yan SB, Bang NU.

Re



Direct expression of recombinant activated human protein C, a serine protease inhibitor.

J Biol Chem. 1989 Aug 25;264(24):14298-304.

PMID: 2668284 [PubMed - indexed for MEDLINE]

55:Levenson RM, Nairn AC, Blackshear PJ.

Related Articles,



Insulin rapidly induces the biosynthesis of elongation factor 2.

J Biol Chem. 1989 Jul 15;264(20):11904-11.

PMID: 2663845 [PubMed - indexed for MEDLINE]

56:Sissom J, Ellis L.

Re



Secretion of the extracellular domain of the human insulin receptor from insect cells using a baculovirus vector.

Biochem J. 1989 Jul 1;261(1):119-26.

PMID: 2673212 [PubMed - indexed for MEDLINE]

57:Kobayashi M, Sasaoka T, Sugibayashi M, Iwanishi M, Shigeta Y.

Re



Receptor binding and biologic activity of biosynthetic human insulin and mini insulin using recombinant gene technology.

Diabetes Res Clin Pract. 1989 Jun 20;7(1):25-8.

PMID: 2666066 [PubMed - indexed for MEDLINE]

58:Goldstein BJ, Kahn CR.

Re



Analysis of mRNA heterogeneity by ribonuclease H mapping: application to the insulin receptor.

Biochem Biophys Res Commun. 1989 Mar 15;159(2):664-9.

PMID: 2539119 [PubMed - indexed for MEDLINE]

59:Semple JW, Cockle SA, Delovitch TL.

Re



Purification and characterization of radiolabelled biosynthetic human insulin and its use in studying the kinetics of processing by antigen presenting cells.

Mol Immunol. 1988 Dec;25(12):1291-8.

PMID: 3070357 [PubMed - indexed for MEDLINE]

60:Markussen J, Diers I, Hougaard P, Langkjaer L, Norris K, Snel L, Sorensen AR, Sorensen E, Voigt HO.

Re



Soluble, prolonged-acting insulin derivatives. III. Degree of protraction, crystallization and stability of insulins substituted in positions A21, B13, B23, B27 and B30.

Protein Eng. 1988 Jul;2(2):157-66.

PMID: 3072564 [PubMed - indexed for MEDLINE]

- 61: Yoshimasa Y, Seino S, Whittaker J, Kakehi T, Kosaki A, Kuzuya H, Imura H, Bell GI, Steiner DF. Related Articles, Protein, OMIM.
Insulin-resistant diabetes due to a point mutation that prevents insulin prorecep Science. 1988 May 6;240(4853):784-7.
PMID: 3283938 [PubMed - indexed for MEDLINE]
- 62: Cascieri MA, Hayes NS, Kelder B, Kopchick JJ, Chicchi GG, Slater EE, Bayne ML. Related Articles, Protein, OMIM.
Inability of a mouse cell line transformed to produce biologically active recombinant-like growth factor I (IGF-I) to respond to exogenously added IGF-I. Endocrinology. 1988 Apr;122(4):1314-20.
PMID: 2964361 [PubMed - indexed for MEDLINE]
- 63: Whittaker J, Okamoto A. Related Articles, Protein, OMIM.
Secretion of soluble functional insulin receptors by transfected NIH3T3 cells. J Biol Chem. 1988 Mar 5;263(7):3063-6.
PMID: 2830271 [PubMed - indexed for MEDLINE]
- 64: Ojamaa K, Hedo JA, Roberts CT Jr, Moncada VY, Gorden P, Ullrich A, Taylor SI. Related Articles, Protein, OMIM.
Defects in human insulin receptor gene expression. Mol Endocrinol. 1988 Mar;2(3):242-7.
PMID: 2840573 [PubMed - indexed for MEDLINE]
- 65: Ellis L, Sissom J, Levitan A. Related Articles, Protein, OMIM.
Truncation of the ectodomain of the human insulin receptor results in secretion of a biologically active binding protein from transfected CHO cells. J Mol Recognit. 1988 Feb;1(1):25-31.
PMID: 3078838 [PubMed - indexed for MEDLINE]
- 66: Rosak C, Boehm BO, Althoff PH, Schoffling K. Related Articles, Protein, OMIM.
Biosynthetic human proinsulin, a new therapeutic compound for diabetics? A comparison of biosynthetic human proinsulin with biosynthetic human insulin. Horm Metab Res Suppl. 1988;18:16-21.
PMID: 3056807 [PubMed - indexed for MEDLINE]
- 67: Seino S, Steiner DF, Bell GI. Related Articles, Nucleotide, Protein, OMIM.
Sequence of a New World primate insulin having low biological potency and high immunoreactivity. Proc Natl Acad Sci U S A. 1987 Nov;84(21):7423-7.
PMID: 3118367 [PubMed - indexed for MEDLINE]
- 68: Akahane K, Tojo A, Urabe A, Takaku F. Related Articles, Protein, OMIM.
Pure erythropoietic colony and burst formations in serum-free culture and their induction by insulin-like growth factor I. Exp Hematol. 1987 Aug;15(7):797-802.
PMID: 3609183 [PubMed - indexed for MEDLINE]
- 69: Tornqvist HE, Pierce MW, Frackelton AR, Nemenoff RA, Avruch J. Related Articles, Protein, OMIM.
Identification of insulin receptor tyrosine residues autophosphorylated in vitro. J Biol Chem. 1987 Jul 25;262(21):10212-9.
PMID: 3038872 [PubMed - indexed for MEDLINE]
- 70: Markussen J, Hougaard P, Ribel U, Sorensen AR, Sorensen E. Related Articles, Protein, OMIM.
Soluble, prolonged-acting insulin derivatives. I. Degree of protraction and crytotoxicity of insulin derivatives substituted in the termini of the B-chain. Protein Eng. 1987 Jun;1(3):205-13.
PMID: 3333846 [PubMed - indexed for MEDLINE]
- 71: Bayne ML, Cascieri MA, Kelder B, Applebaum J. Related Articles, Nucleotide, Protein, OMIM.

Chicchi G, Shapiro JA, Pasleau F, Kopchick JJ.



Expression of a synthetic gene encoding human insulin-like growth factor I in fibroblasts.

Proc Natl Acad Sci U S A. 1987 May;84(9):2638-42.

PMID: 3033657 [PubMed - indexed for MEDLINE]

72: Nishida Y, Hata M, Nishizuka Y, Rutter WJ, Ebina Y.

Related Articles, Nucle



Cloning of a Drosophila cDNA encoding a polypeptide similar to the human insulin precursor.

Biochem Biophys Res Commun. 1986 Dec 15;141(2):474-81.

PMID: 3099787 [PubMed - indexed for MEDLINE]

73: Scheiwiller E, Guler HP, Merryweather J, Scandella C, Maerki W, Zapf J, Froesch ER. Related Articles,



Growth restoration of insulin-deficient diabetic rats by recombinant human insulin. Nature. 1986 Sep 11-17;323(6084):169-71.

PMID: 3528867 [PubMed - indexed for MEDLINE]

74: Forsayeth J, Maddux B, Goldfine ID.

Re



Biosynthesis and processing of the human insulin receptor.

Diabetes. 1986 Jul;35(7):837-46.

PMID: 3721067 [PubMed - indexed for MEDLINE]

75: Rotwein P, Pollock KM, Didier DK, Krivi GG.

Related Articles, Nucleotide, Protein,



Organization and sequence of the human insulin-like growth factor I gene. Alternative processing produces two insulin-like growth factor I precursor peptides.

J Biol Chem. 1986 Apr 15;261(11):4828-32.

PMID: 2937782 [PubMed - indexed for MEDLINE]

76: Ebina Y, Edery M, Ellis L, Standring D, Beaudoin J, Roth RA, Rutter WJ. Related Articles,



Expression of a functional human insulin receptor from a cloned cDNA in Chinese cells.

Proc Natl Acad Sci U S A. 1985 Dec;82(23):8014-8.

PMID: 3906655 [PubMed - indexed for MEDLINE]

77: Given BD, Cohen RM, Shoelson SE, Frank BH, Rubenstein AH, Tager HS.

Re



Biochemical and clinical implications of proinsulin conversion intermediates.

J Clin Invest. 1985 Oct;76(4):1398-405.

PMID: 3902891 [PubMed - indexed for MEDLINE]

78: Ebina Y, Related Articles, Nucleotide, Protein, Structure, 3D Domains, OMIM, Cited in PMC, C

Ellis L,

Jarnagin

K,

Edery

M, Graf

L,

Clauser

E, Ou

JH,

Masiarz

F, Kan

YW,

Goldfine

ID, et al.



The human insulin receptor cDNA: the structural basis for hormone-activated signalling.

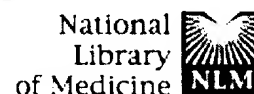
Cell. 1985 Apr;40(4):747-58

PMID: 2859121 [PubMed - indexed for MEDLINE]

- 79: Ullrich A, Bell JR, Chen EY, Related Articles, Nucleotide, Protein, OMIM, Cited in PMC, C Herrera R, Petruzzelli LM, Dull TJ, Gray A, Coussens L, Liao YC, Tsubokawa M. et al.
Human insulin receptor and its relationship to the tyrosine kinase family of on Nature. 1985 Feb 28-Mar 6;313(6005):756-61.
PMID: 2983222 [PubMed - indexed for MEDLINE]
- 80: Jansen M, van Schaik FM, van Tol H, Van den Related Articles, Nucleotide, Protein, OMIM, Brande JL, Sussenbach JS.
Nucleotide sequences of cDNAs encoding precursors of human insulin-like gr and an IGF-II variant.
FEBS Lett. 1985 Jan 7;179(2):243-6.
PMID: 3881277 [PubMed - indexed for MEDLINE]
- 81: Whitfield HJ, Bruni CB, Frunzio R, Terrell JE, Nissley SP, Rechler Related Articles, Nucle MM.
Isolation of a cDNA clone encoding rat insulin-like growth factor-II precursor Nature. 1984 Nov 15-21;312(5991):277-80.
PMID: 6390212 [PubMed - indexed for MEDLINE]
- 82: Ullrich A, Berman CH, Dull TJ, Related Articles, Nucleotide, Protein, OMIM, Cited in PMC, C Gray A, Lee JM.
Isolation of the human insulin-like growth factor I gene using a single syntheti EMBO J. 1984 Feb;3(2):361-4.
PMID: 6232133 [PubMed - indexed for MEDLINE]
- 83: Jansen M, van Schaik FM, Ricker AT, Bullock B, Related Articles, Nucleotide, Protein, Woods DE, Gabbay KH, Nussbaum AL, Sussenbach JS, Van den Brande JL.
Sequence of cDNA encoding human insulin-like growth factor I precursor.
Nature. 1983 Dec 8-14;306(5943):609-11.
PMID: 6358902 [PubMed - indexed for MEDLINE]
- 84: Kurtz A, Jelkmann W, Bauer C. Re
A new candidate for the regulation of erythropoiesis. Insulin-like growth facto FEBS Lett. 1982 Nov 22;149(1):105-8.
PMID: 6759171 [PubMed - indexed for MEDLINE]
- 85: Goeddel DV, Kleid DG, Bolivar F, Heyneker HL, Yansura DG, Crea R, Hirose T, Re Kraszewski A, Itakura K, Riggs AD.
Expression in Escherichia coli of chemically synthesized genes for human insi Proc Natl Acad Sci U S A. 1979 Jan;76(1):106-10.
PMID: 85300 [PubMed - indexed for MEDLINE]
- 86: Creutzfeldt W, Creutzfeldt C, Frerichs H, Track NS, Arnold R. Re
Histochemistry, ultrastructure and hormone content of human insulinomas.
Horm Metab Res. 1976;Suppl 6:7-18.
PMID: 179934 [PubMed - indexed for MEDLINE]

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Identification of cellular changes associated with increased production of human growth hormone in a recombinant Chinese hamster ovary cell line.

Proteomics. 2003 Feb;3(2):147-156.

PMID: 12601807 [PubMed - as supplied by publisher]

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Identification and characterization of the prolactin-binding protein in human serum and milk.

J Biol Chem. 2001 Jul 6;276(27):24760-6.

PMID: 11337493 [PubMed - indexed for MEDLINE]

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ERD2 proteins mediate ER retention of the HNEL signal of LRP's receptor-associated protein (RAP).

J Cell Sci. 1997 Jan;110 (Pt 1):65-73.

PMID: 9010785 [PubMed - indexed for MEDLINE]

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=> s human insulin precursor
1099877 HUMAN
303314 HUMANS
1258052 HUMAN
(HUMAN OR HUMANS)
148422 INSULIN
1884 INSULINS
148457 INSULIN
(INSULIN OR INSULINS)
186383 PRECURSOR
93543 PRECURSORS
250019 PRECURSOR
(PRECURSOR OR PRECURSORS)
L1 23 HUMAN INSULIN PRECURSOR
(HUMAN(W)INSULIN(W)PRECURSOR)

=> D L1 1-23

L1 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2002:964382 CAPLUS
DN 138:38146
TI Method for making insulin precursors and insulin precursor analogs
IN Kjeldsen, Thomas Borglum; Diers, Ivan
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002100887	A2	20021219	WO 2002-DK376	20020603
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003040601	A1	20030227	US 2002-166241	20020607
PRAI	DK 2001-894	A	20010608		
	US 2001-299091P	P	20010618		
OS	MARPAT 138:38146				

L1 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2002:777982 CAPLUS
DN 137:299873
TI Method for making ***human*** ***insulin*** ***precursors***
IN Kjeldsen, Thomas Borglum; Ludvigsen, Svend
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079251	A2	20021010	WO 2002-DK191	20020321
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI DK 2001-548 A 20010402
OS MARPAT 137:299873

L1 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2002:427674 CAPLUS
DN 137:1510
TI Construction of recombinant yeast strain of Pichia pastoris for expression
of ***human*** ***insulin*** ***precursor***
IN Annibali, Nestor
PA Laboratorios Beta S.A., Argent.
SO Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1211314	A2	20020605	EP 2001-121987	20010913
	EP 1211314	A3	20020710		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001005162	A	20020521	BR 2001-5162	20010912
PRAI	AR 2000-104797	A	20000913		

L1 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2001:765696 CAPLUS
DN 136:48575
TI Analysis of the distribution of amino acids, amino acid pairs and triplets
in ***human*** ***insulin*** ***precursor*** and its four
variants according to the random mechanism
AU Wu, Guang; Yan, Shao-Min
CS Laboratoire de Toxicocinetique et Pharmacocinetique, Faculte de Pharmacie,
Universite de la Mediterranee Aix-Marseille II, Marseille, F-13385, Fr.
SO Journal of Biochemistry, Molecular Biology and Biophysics (2001), 5(4),
293-300
CODEN: JBMBF6; ISSN: 1025-8140
PB Harwood Academic Publishers
DT Journal
LA English
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2001:343309 CAPLUS
DN 134:339588
TI Production and purification of single chain ***human***
insulin ***precursors*** with various fusion peptides
AU Cho, Chung Woo; Park, Sun Ho; Nam, Doo Hyun
CS Faculty of Engineering, Keimyung University, Taegu, 704-701, S. Korea
SO Biotechnology and Bioprocess Engineering (2001), 6(2), 144-149
CODEN: BBEIAU; ISSN: 1226-8372
PB Korean Society for Biotechnology and Bioengineering
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2001:293295 CAPLUS
DN 135:87352
TI Gene therapy for streptozotocin-induced diabetic mice by electroporational
transfer of naked ***human*** ***insulin*** ***precursor***
DNA into skeletal muscle in vivo
AU Yin, D.; Tang, J.-G.
CS National Laboratory of Protein Engineering and Plant Genetic Engineering,
Peking University, College of Life Sciences, Beijing, 100871, Peop. Rep.
China
SO FEBS Letters (2001), 495(1,2), 16-20
CODEN: FEBLAL; ISSN: 0014-5793
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 2000:397959 CAPLUS
DN 133:188612
TI Use of *Bacillus brevis* for synthesis and secretion of Des-B30 single-chain
human ***insulin*** ***precursor***
AU Koh, Mamoru; Hanagata, Hiroshi; Ebisu, Shogo; Morihara, Kazuyuki; Takagi,
Hiroaki
CS Institute for Applied Life Science, Graduate School, University of East
Asia, Shimonoseki, 751-0807, Japan
SO Bioscience, Biotechnology, and Biochemistry (2000), 64(5), 1079-1081
CODEN: BBBIEJ; ISSN: 0916-8451
PB Japan Society for Bioscience, Biotechnology, and Agrochemistry
DT Journal
LA English
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2000:200614 CAPLUS
DN 133:22490
TI New strategy for the design of ligands for the purification of
pharmaceutical proteins by affinity chromatography
AU Sproule, K.; Morrill, P.; Pearson, J. C.; Burton, S. J.; Hejnaes, K. R.;
Valore, H.; Ludvigsen, S.; Lowe, C. R.
CS Institute of Biotechnology, University of Cambridge, Cambridge, UK
SO Journal of Chromatography, B: Biomedical Sciences and Applications (2000),
740(1), 17-33
CODEN: JCBBEP; ISSN: 0378-4347
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1999:285828 CAPLUS
DN 131:97699
TI A comparison of three dimensional structures of biosynthesized
preproinsulin and insulin using NMR
AU Oh, Mina; Mok, K. Hun; Lim, Yoongho
CS Department of Applied Biology and Chemistry, Konkuk University, Seoul,
133-701, S. Korea
SO Agricultural Chemistry and Biotechnology (English Edition) (1998), 41(8),
572-577
CODEN: ACBTFF; ISSN: 1229-2737
PB Korean Society of Agricultural Chemistry and Biotechnology
DT Journal
LA English
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1999:285827 CAPLUS
DN 131:97698
TI A comparison of three dimensional structures of insulin, proinsulin and
preproinsulin using computer aided molecular modeling
AU Oh, Mina; Mok, K. Hun; Lim, Yoongho
CS Department of Applied Biology and Chemistry, Konkuk University, Seoul,
133-701, S. Korea
SO Agricultural Chemistry and Biotechnology (English Edition) (1998), 41(8),
568-571
CODEN: ACBTFF; ISSN: 1229-2737
PB Korean Society of Agricultural Chemistry and Biotechnology
DT Journal
LA English
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1997:54270 CAPLUS
DN 126:141722
TI The rapid identification of protein through its amino acid composition
AU Wang, Huaichun; Xia, Yun; He, Yu
CS Institute of Medical Information, Academy of Military Medical Sciences,
Beijing, 100850, Peop. Rep. China
SO Shengwu Huaxue Yu Shengwu wuli xuebao (1996), 28(3), 293-299
CODEN: SHWPAU; ISSN: 0582-9879

PB Shanghai Kexue Jishu Chubanshe
DT Journal
LA Chinese

L1 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1996:337172 CAPLUS
DN 125:76661
TI Recombinant A17 Lys human insulin: purification and characterization
AU Zhang, Bao-yan; Zhang, You-shang; Cai, Ruo-rong; Feng, You-min; He, Qian-bin
CS State Key Lab. of Mol. Biology, Shanghai Inst. Biochem., Shanghai, 200031, Peop. Rep. China
SO Biochemistry and Molecular Biology International (1995), 36(5), 1079-1085
CODEN: BMBIES; ISSN: 1039-9712
PB Academic
DT Journal
LA English

L1 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1995:1007421 CAPLUS
DN 124:107969
TI Preparation of Tyr-C-peptide from genetically altered ***human***
insulin ***precursor***
AU Sun, Huaiyu; Tang, Jianguo; Hu, Meihao
CS College of Life Sciences, Peking University, Beijing, 100871, Peop. Rep. China
SO Applied Biochemistry and Biotechnology (1995), 55(3), 167-74
CODEN: ABIBDL; ISSN: 0273-2289
PB Humana
DT Journal
LA English

L1 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1995:928289 CAPLUS
DN 124:46622
TI Secretion expression of ***human*** ***insulin***
precursor in yeast and preparation of human insulin
IN Zhang, Youshang; Feng, Youmin; Zhu, Shanquan
PA Shanghai Institute of Biochemistry, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 23 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1101945	A	19950426	CN 1993-112586	19931018
	CN 1049249	B	20000209		
PRAI	CN 1993-112586		19931018		

L1 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1995:663399 CAPLUS
DN 123:81632
TI Host cell properties and external pH affect proinsulin production by Saccharomyces yeast
AU Kozlov, Dmitry G.; Prahl, Natalija; Efremov, Boris D.; Peters, Lars; Wambut, Rolf; Karpychev, Igor V.; Eldarov, Mikhail A.; Benevolensky, Sergei V.
CS Institute Genetics Selection Industrial Microorganisms, Moscow, 113545, Russia
SO Yeast (1995), 11(8), 713-24
CODEN: YESTE3; ISSN: 0749-503X
PB Wiley
DT Journal
LA English

L1 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1994:708134 CAPLUS
DN 121:308134
TI Processing of biosynthetic human insulin analog precursors using Achromobacter lyticus lysyl-specific endopeptidase
AU Balschmidt, P.
CS Novo Nordisk A/S, Bagsvaerd, DK-2880, Den.
SO Research Disclosure (1994), 365, 487-8
CODEN: RSDSBB; ISSN: 0374-4353
DT Journal

LA English

L1 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1994:105174 CAPLUS

DN 120:105174

TI Direct expression of ***human*** ***insulin*** ***precursor***
gene in Escherichia coli and after-processing method

IN Tang, Jianguo; Hu, Meihao

PA Beijing University, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1075983	A	19930908	CN 1993-103997	19930410
	CN 1059703	B	20001220		
PRAI	CN 1993-103997		19930410		

L1 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1991:4881 CAPLUS

DN 114:4881

TI Manufacture of biologically active proteins such as human insulin from
recombinant fusion protein

IN Vertesy, Laszlo; Sauber, Klaus; Ehlers, Eberhard

PA Hoechst A.-G., Germany

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3837271	A1	19900510	DE 1988-3837271	19881103
	EP 367161	A2	19900509	EP 1989-120054	19891028
	EP 367161	A3	19910925		
	EP 367161	B1	19960619		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	AT 139538	E	19960715	AT 1989-120054	19891028
	ES 2088883	T3	19961001	ES 1989-120054	19891028
	DK 8905466	A	19900504	DK 1989-5466	19891102
	NO 8904362	A	19900504	NO 1989-4362	19891102
	AU 8943977	A1	19900510	AU 1989-43977	19891102
	AU 618420	B2	19911219		
	JP 02195896	A2	19900802	JP 1989-285089	19891102
	JP 2877253	B2	19990331		
	ZA 8908376	A	19900829	ZA 1989-8376	19891103
	HU 53677	A2	19901128	HU 1989-5664	19891103
PRAI	DE 1988-3837271		19881103		

L1 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:199012 CAPLUS

DN 108:199012

TI Human Insulin by Tryptic Transpeptidations of Porcine Insulin and
Biosynthetic Precursors

AU Markussen, J.

CS UK

SO (1987) Publisher: (MTP Press Ltd., Lancaster, UK), 240 pp. .pnd.35.00.

DT Book

LA English

L1 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:166031 CAPLUS

DN 108:166031

TI HPLC quantification of rDNA polypeptides like insulin precursors produced
in yeast

AU Snel, L.; Damgaard, U.; Mollerup, I.

CS Novo Res. Inst., Bagsvaerd, DK-2880, Den.

SO Chromatographia (1987), 24, 329-32

CODEN: CHRGB7; ISSN: 0009-5893

DT Journal

LA English

L1 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2003 ACS

AN 1988:144407 CAPLUS

DN 108:144407
 TI Sequence of a New world prolate insulin having low biologic potency and immunoreactivity
 AU Seino, Susumu; Steiner, Donald F.; Bell, Graeme I.
 CS Howard Hughes Med. Inst., Univ. Chicago, Chicago, IL, 60637, USA
 SO Proceedings of the National Academy of Sciences of the United States of America (1987), 84(21), 7423-7
 CODEN: PNASA6; ISSN: 0027-8424
 DT Journal
 LA English

L1 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:65841 CAPLUS
 DN 106:65841
 TI Insulin precursors and preparation of human insulin
 IN Thim, Lars; Norris, Kjeld; Hansen, Mogens Trier
 PA Novo Industri A/S, Den.
 SO Eur. Pat. Appl., 42 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 195691	A1	19860924	EP 1986-302133	19860321
	EP 195691	B1	19911106		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	DK 8501293	A	19860923	DK 1985-1293	19850322
	ZA 8601953	A	19861126	ZA 1986-1953	19860317
	DK 8601257	A	19861117	DK 1986-1257	19860319
	DK 158270	B	19900423		
	DK 158270	C	19900910		
	JP 61221200	A2	19861001	JP 1986-60995	19860320
	JP 06048993	B4	19940629		
	FI 8601198	A	19860923	FI 1986-1198	19860321
	FI 87801	B	19921113		
	FI 87801	C	19930225		
	NO 8601120	A	19860923	NO 1986-1120	19860321
	NO 172646	B	19930510		
	NO 172646	C	19930818		
	AU 8655005	A1	19860925	AU 1986-55005	19860321
	AU 586855	B2	19890727		
	ES 553231	A1	19880516	ES 1986-553231	19860321
	AT 69266	E	19911115	AT 1986-302133	19860321
	ES 557227	A1	19871001	ES 1986-557227	19861128
	JP 06133777	A2	19940517	JP 1993-121394	19930524
	JP 08008871	B4	19960131		
	JP 08023985	A2	19960130	JP 1995-178875	19950714
	JP 2553326	B2	19961113		
PRAI	DK 1985-1293		19850322		
	EP 1986-302133		19860321		

L1 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 1986:143163 CAPLUS
 DN 104:143163
 TI Insulin precursors for preparing human insulin from such insulin precursors
 IN Markussen, Jan; Fiil, Niels; Ammerer, Gustav; Hansen, Mogens Trier; Thim, Lars; Norris, Kjeld; Voigt, Hans Ole
 PA Novo Industri A/S, Den.
 SO Eur. Pat. Appl., 46 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 163529	A1	19851204	EP 1985-303775	19850529
	EP 163529	B1	19910821		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	ZA 8504083	A	19860129	ZA 1985-4083	19850520
	FI 8502135	A	19851201	FI 1985-2135	19850529
	FI 89183	B	19930514		
	FI 89183	C	19930825		
	DK 8502385	A	19851201	DK 1985-2385	19850529
	DK 157938	B	19900305		

DK 157938	C	19900827		
NO 8502132	A	19850202	NO 1985-2132	19850202
NO 174351	B	19940110		
NO 174351	C	19940420		
AU 8543092	A1	19851205	AU 1985-43092	19850529
AU 590197	B2	19891102		
JP 61001389	A2	19860107	JP 1985-116297	19850529
JP 06030613	B4	19940427		
ES 543594	A1	19860901	ES 1985-543594	19850529
US 4916212	A	19900410	US 1985-739123	19850529
EP 427296	A1	19910515	EP 1990-121887	19850529
EP 427296	B1	19960925		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 66490	E	19910915	AT 1985-303775	19850529
CA 1304022	A1	19920623	CA 1985-482722	19850529
AT 143374	E	19961015	AT 1990-121887	19850529
ES 551941	A1	19861216	ES 1986-551941	19860213
DK 157933	B	19900305	DK 1987-3236	19870625
DK 8703236	A	19870625		
DK 157933	C	19900827		
JP 06141866	A2	19940524	JP 1993-121649	19930524
JP 07121226	B4	19951225		
JP 06141865	A2	19940524	JP 1993-121694	19930524
JP 07046998	B4	19950524		
JP 07309896	A2	19951128	JP 1995-142085	19950608
JP 2519023	B2	19960731		
PRAI DK 1984-2665		19840530		
DK 1985-582		19850208		
DK 1985-2385		19850529		
EP 1985-303775		19850529		

=> s urea AND insulin

178068 UREA

8613 UREAS

180981 UREA

(UREA OR UREAS)

148422 INSULIN

1884 INSULINS

148457 INSULIN

(INSULIN OR INSULINS)

L2 2181 UREA AND INSULIN

=> S L2 AND conformation

248819 CONFORMATION

42540 CONFORMATIONS

258811 CONFORMATION

(CONFORMATION OR CONFORMATIONS)

L3 31 L2 AND CONFORMATION

=> D L3 1-31

L3 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 2001:740961 CAPLUS

DN 136:81523

TI Heat-induced quaternary transitions in hetero- and homo-polymers of .alpha.-crystallin

AU Burgio, M. R.; Bennett, P. M.; Koretz, J. F.

CS Center for Biophysics and Department of Biology, Science Center, Rensselaer Polytechnic Institute, Troy, NY, USA

SO Molecular vision [online computer file] (2001), 7, 228-233

CODEN: MVEPFB; ISSN: 1090-0535

URL: <http://www.molvis.org/molvis/v7/a32/burgio.pdf>

PB Molecular vision

DT Journal; (online computer file)

LA English

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 2001:569707 CAPLUS

DN 135:147460

TI Correction of genetic defects using chemical chaperones

IN welch, william J.; Brown, C. Randell; Tatzelt, Jorg

PA The Regents of the University of California, USA

SO U.S., 55 pp., Cont.-in-part of U.S. 5,900,360.

CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6270954	B1	20010807	US 1999-291406	19990413
	US 5900360	A	19990504	US 1997-838691	19970409
	US 2001021500	A1	20010913	US 2001-823657	20010330
PRAI	US 1996-15155P	P	19960410		
	US 1997-838691	A2	19970409		
	WO 1997-US5846	W	19970409		
	US 1999-291406	A1	19990413		

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 2001:228920 CAPLUS
DN 134:247226
TI Methods for identifying an agent that corrects defective protein folding
IN Pedersen, Peter L.; Ko, Young Hee
PA The John Hopkins University School of Medicine, USA
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001021652	A1	20010329	WO 2000-US26193	20000922
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1999-155876P P 19990924

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 2000:194076 CAPLUS
DN 133:73461
TI Relationship between nutritionally-mediated placental growth restriction and fetal growth, body composition and endocrine status during late gestation in adolescent sheep
AU Wallace, J. M.; Bourke, D. A.; Aitken, R. P.; Palmer, R. M.; Da Silva, P.; Cruickshank, M. A.
CS Rowett Research Institute, Aberdeen, AB21 9SB, UK
SO Placenta (2000), 21(1), 100-108
CODEN: PLACDF; ISSN: 0143-4004
PB W. B. Saunders Co. Ltd.

DT Journal
LA English

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 1999:416379 CAPLUS
DN 131:169753
TI Switching maternal dietary intake at the end of the first trimester has profound effects on placental development and fetal growth in adolescent ewes carrying singleton fetuses
AU wallace, Jacqueline M.; Bourke, Deirdre A.; Aitken, Raymond P.; Cruickshank, Morven A.
CS Rowett Research Institute, Bucksburn, Aberdeen, AB21 9SB, UK
SO Biology of Reproduction (1999), 61(1), 101-110
CODEN: BIREBV; ISSN: 0006-3363
PB Society for the Study of Reproduction

DT Journal
LA English

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1997:119202 CAPLUS

DN 126:129012

TI Folding and disulfide bonding of IGF-I., IGFBP-3, and their complexes after their recombinant production

IN Sommer, Andreas; Ogawa, Yasushi; Tao, Peggy

PA Celtrix Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9640736	A1	19961219	WO 1996-US8113	19960530
	W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR			
	US 5789547	A	19980804	US 1995-482271	19950607
	CA 2223495	AA	19961219	CA 1996-2223495	19960530
	AU 9659576	A1	19961230	AU 1996-59576	19960530
	AU 703489	B2	19990325		
	EP 832098	A1	19980401	EP 1996-916829	19960530
	EP 832098	B1	20020911		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	CN 1214689	A	19990421	CN 1996-195432	19960530
	JP 11507037	T2	19990622	JP 1996-500881	19960530
	AT 223926	E	20020915	AT 1996-916829	19960530
	NO 9705749	A	19980127	NO 1997-5749	19971205
PRAI	US 1995-482271	A	19950607		
	WO 1996-US8113	W	19960530		

L3 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1996:617214 CAPLUS

DN 126:3980

TI Anomalous mobility of sulfitolyzed proteins in SDS-PAGE. Analysis and applications

AU Malhotra, M.; Sahal, D.

CS International Centre Genetic Eng. Biotechnology, Aruna Asaf Ali Marg, Recombinant Gene Products, New Delhi, India

SO International Journal of Peptide & Protein Research (1996), 48(3), 240-248

CODEN: IJPPC3; ISSN: 0367-8377

PB Munksgaard

DT Journal

LA English

L3 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1996:398577 CAPLUS

DN 125:49528

TI Effect of solvent additives on the thermal stability of ***insulin***

AU Gupta, Vinita; Bhat, Rajiv

CS Centre Biotechnology, Jawaharlal Nehru University, New Delhi, 110 067, India

SO Perspectives on Protein Engineering & Complementary Technologies, Collected Papers, International Symposium, 3rd, Oxford, Sept. 13-17, 1994 (1995), Meeting Date 1994, 209-212. Editor(s): Geisow, Michael J.; Epton, Roger. Publisher: Mayflower worldwide, Kingswinford, UK.

CODEN: 62ZQAP

DT Conference

LA English

L3 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1995:610625 CAPLUS

DN 123:8040

TI Extraction of polypeptide inclusion bodies from expression hosts with a two-phase aqueous system with solubilization and renaturation of the polypeptide

IN Builder, Stuart; Hart, Roger; Lester, Philip; Ogez, John; Reifsnnyder, David

PA Genentech, Inc., USA

SO PCT Int. Appl., 69 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9506059	A1	19950302	WO 1994-US9089	19940810
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5407810	A	19950418	US 1993-110663	19930820
	CA 2167910	AA	19950302	CA 1994-2167910	19940810
	AU 9475616	A1	19950321	AU 1994-75616	19940810
	AU 673624	B2	19961114		
	EP 714403	A1	19960605	EP 1994-925830	19940810
	EP 714403	B1	19980610		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09501931	T2	19970225	JP 1994-507623	19940810
	AT 167193	E	19980615	AT 1994-925830	19940810
	ES 2119222	T3	19981001	ES 1994-925830	19940810
	US 5723310	A	19980303	US 1995-385187	19950207
	US 5695958	A	19971209	US 1995-446882	19950517
PRAI	US 1993-110663		19930820		
	WO 1994-US9089		19940810		
	US 1994-318627		19941011		
	US 1995-385187		19950207		

L3 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1994:293570 CAPLUS

DN 120:293570

TI Sorbent families of peptides for affinity chromatography supports and labeled reagents

IN Kauvar, Lawrence M.

PA Terrapin Technologies, Inc., USA

SO PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9402225	A1	19940203	WO 1993-US6578	19930713
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 652798	A1	19950517	EP 1993-917148	19930713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07509400	T2	19951019	JP 1993-504528	19930713
	AU 675446	B2	19970206	AU 1993-46758	19930713
	AU 9346758	A1	19940214		
	US 5599901	A	19970204	US 1994-248538	19940524
	US 5801225	A	19980901	US 1996-690605	19960731
PRAI	US 1992-920335	A	19920727		
	WO 1993-US6578	W	19930713		
	US 1994-248538	A3	19940524		

L3 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1993:648880 CAPLUS

DN 119:248880

TI Effects of growth hormone-releasing factor and(or) thyrotropin-releasing hormone on growth, feed efficiency, carcass characteristics, and blood hormones and metabolites in beef heifers

AU Enright, W. J.; Prendiville, D. J.; Spicer, L. J.; Stricker, P. R.; Moloney, A. P.; Mowles, T. F.; Campbell, R. M.

CS Grange Res. Cent., Teagasc, Dunsany, Ire.

SO Journal of Animal Science (Savoy, IL, United States) (1993), 71(9), 2395-405

CODEN: JANSAG; ISSN: 0021-8812

DT Journal

LA English

L3 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1993:537529 CAPLUS

DN 119:137529

TI Method for refolding ***insulin*** -like growth factor I to active ***conformation***

IN Chang, Judy Yi Huei; McFarland, Nancy C.; Swartz, James R.

PA Genentech, Inc., USA

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9311240	A1	19930610	WO 1992-US10625	19921204
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5288931	A	19940222	US 1991-808451	19911206
	EP 618971	A1	19941012	EP 1993-901363	19921204
	EP 618971	B1	19990317		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	ES 2131573	T3	19990801	ES 1993-901363	19921204
	US 5410026	A	19950425	US 1993-161044	19931202
PRAI	US 1991-808451		19911206		
	WO 1992-US10625		19921204		

L3 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1991:627782 CAPLUS

DN 115:227782

TI Immunoaffinity chromatography method using denaturation-renaturation for protein purification, and production and immobilization of monoclonal antibody to human ***insulin*** receptor fragment for use therein

IN Markussen, Jan

PA Novo-Nordisk A/S, Den.

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9107428	A1	19910530	WO 1990-DK298	19901120
	W: AU, CA, FI, JP, KR, NO, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9067509	A1	19910613	AU 1990-67509	19901120
	EP 502050	A1	19920909	EP 1990-917408	19901120
	EP 502050	B1	19960925		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05503081	T2	19930527	JP 1991-500070	19901120
	AT 143371	E	19961015	AT 1990-917408	19901120
	US 5317092	A	19940531	US 1992-721582	19920605
PRAI	DK 1989-5807		19891120		
	WO 1990-DK298		19901120		

L3 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1991:468039 CAPLUS

DN 115:68039

TI Continuous method of refolding proteins by diluting out the solubilizing agent to restore the biological activity

IN Galliher, Parrish M.

PA Biogen N. V., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4999422	A	19910312	US 1988-181963	19880415
PRAI	US 1988-181963		19880415		

L3 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2003 ACS

AN 1989:420334 CAPLUS

DN 111:20334

TI Sensitivity and variability of the Bradford protein assay in the presence of detergents

AU Friedenauer, Susanne; Berlet, Hans H.

CS Inst. Pathochem. Gen. Neurochem., Heidelberg, D-6900, Fed. Rep. Ger.

SO Analytical Biochemistry (1989), 178(2), 263-8

CODEN: ANBCA2; ISSN: 0003-2697

DT Journal

LA English

L3 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1989:22757 CAPLUS
 DN 110:22757
 TI Effects of the .beta.-agonist cimaterol on blood metabolite and hormone concentrations, growth and carcass composition in finishing Friesian steers
 AU Quirke, J. F.; Allen, P.; Moloney, A. P.; Sommer, M.; Hanrahan, J. P.; Sheehan, W.; Roche, J. F.
 CS Univ. Coll., Boehringer Ingelheim Vetmed. G.m.b.H., Fed. Rep. Ger.
 SO Journal of Animal Physiology and Animal Nutrition (1988), 60(3), 128-36
 CODEN: JAPNEF; ISSN: 0931-2439
 DT Journal
 LA English

L3 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1987:29003 CAPLUS
 DN 106:29003
 TI Structure of human ***insulin*** receptor
 AU Ramachandran, J.; Grunfeld, C.
 CS Genentech, Inc., South San Francisco, CA, 94080, USA
 SO Protides of the Biological Fluids (1986), 34, 73-6
 CODEN: PBFPA6; ISSN: 0079-7065
 DT Journal
 LA English

L3 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1986:30616 CAPLUS
 DN 104:30616
 TI ***Urea*** treatment allows dithiothreitol to release the binding subunit of the ***insulin*** receptor from the cell membrane: implications for the structural organization of the ***insulin*** receptor
 AU Grunfeld, Carl; Shigenaga, Judy Kwan; Ramachandran, J.
 CS Dep. Med., Univ. California, San Francisco, CA, 94121, USA
 SO Biochemical and Biophysical Research Communications (1985), 133(2), 389-96
 CODEN: BBRC A9; ISSN: 0006-291X
 DT Journal
 LA English

L3 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1984:563858 CAPLUS
 DN 101:163858
 TI The interaction of the S-thiomethyl ***insulin*** A and B chains in solution
 AU Hua, Qingxin; Qian, Yanqiu; Tsou, Chenlu
 CS Inst. Biophys., Acad. Sin., Beijing, 100080, Peop. Rep. China
 SO Biochimica et Biophysica Acta (1984), 789(2), 234-40
 CODEN: BBACAQ; ISSN: 0006-3002
 DT Journal
 LA English

L3 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1983:166848 CAPLUS
 DN 98:166848
 TI Prevention of ***insulin*** self-association and surface adsorption
 AU Sato, Shuji; Ebert, Charles D.; Kim, Sung Wan
 CS Dep. Pharm., Univ. Utah, Salt Lake City, UT, 84112, USA
 SO Journal of Pharmaceutical Sciences (1983), 72(3), 228-32
 CODEN: JPMSAE; ISSN: 0022-3549
 DT Journal
 LA English

L3 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1978:523558 CAPLUS
 DN 89:123558
 TI Performance, blood and carcass characteristics of finishing steers treated with trenbolone acetate and hexestrol
 AU Galbraith, H.; Watson, Helen B.
 CS Aberdeen Sch. Agric., Aberdeen, UK
 SO Veterinary Record (1978), 103(2), 28-31
 CODEN: VETRAX; ISSN: 0042-4900
 DT Journal
 LA English

L3 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:410801 CAPLUS

DN 83:10801
 TI Conformational analysis of the circular dichroism spectra of
 insulin, proinsulin, and C-peptides by nonlinear regression
 AU Markussen, Jan; Voelund, Aage
 CS Novo Res. Inst., Copenhagen, Den.
 SO International Journal of Peptide & Protein Research (1975), 7(1), 47-56
 CODEN: IJPPC3; ISSN: 0367-8377
 DT Journal
 LA English

L3 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1975:58105 CAPLUS
 DN 82:58105
 TI Reduction-reoxidation studies with crosslinked ***insulin***
 derivatives
 AU Wollmer, Axel; Brandenburg, Dietrich; Vogt, Hans P.; Schermutzki, Winrich
 CS Abt. Physiol. Chem., Rheinisch-Westfael. Tech. Hochsch. Aachen, Aachen,
 Fed. Rep. Ger.
 SO Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1974), 355(11),
 1471-6
 CODEN: HSZPAZ; ISSN: 0018-4888
 DT Journal
 LA English

L3 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1973:492568 CAPLUS
 DN 79:92568
 TI Peptides. 91. Effects of a nonpeptide interchain crosslink on the
 reoxidation of reduced ***insulin***
 AU Brandenburg, Dietrich; Wollmer, Axel
 CS Dtsch. wofforschungsinst., Aachen, Fed. Rep. Ger.
 SO Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1973), 354(6),
 613-27
 CODEN: HSZPAZ; ISSN: 0018-4888
 DT Journal
 LA English

L3 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1971:135267 CAPLUS
 DN 74:135267
 TI Isoelectric points and ***conformation*** of proteins. I. Effect of
 urea on the behavior of some proteins in isoelectric focussing
 AU Ui, Nobuo
 CS Inst. Endocrinol., Gunma Univ., Maebashi, Japan
 SO Biochimica et Biophysica Acta (1971), 229(3), 567-81
 CODEN: BBACAQ; ISSN: 0006-3002
 DT Journal
 LA English

L3 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1971:72609 CAPLUS
 DN 74:72609
 TI Molecular weight analysis of oligopeptides by electrophoresis in
 polyacrylamide gel with sodium dodecyl sulfate
 AU Swank, Richard T.; Munkres, Kenneth D.
 CS Lab. Mol. Biol., Univ. Wisconsin, Madison, WI, USA
 SO Analytical Biochemistry (1971), 39(2), 462-77
 CODEN: ANBCA2; ISSN: 0003-2697
 DT Journal
 LA English

L3 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1970:483870 CAPLUS
 DN 73:83870
 TI ***Insulin*** methyl ester. Specific cleavage of a peptide chain
 resulting from a nitrogen to oxygen acyl shift at a threonine residue
 AU Levy, Daniel; Carpenter, Frederick H.
 CS Sch. of Med., Univ. of Southern Calif., Los Angeles, CA, USA
 SO Biochemistry (1970), 9(16), 3215-22
 CODEN: BICHAW; ISSN: 0006-2960
 DT Journal
 LA English

L3 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2003 ACS
 AN 1970:480 CAPLUS
 DN 72:480

TI Iodination of ***insulin*** in aqueous and organic solvents
AU Massaglia, A.; Rosa, U.; Faddi, G.; Rossi, C. A.
CS Nucl. Res. Centre, SORIN, Saluggia, Italy
SO Biochemical Journal (1969), 115(1), 11-18
CODEN: BIJOAK; ISSN: 0264-6021
DT Journal
LA English

L3 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 1965:30692 CAPLUS
DN 62:30692
OREF 62:5478c-f

TI ***Conformation*** of proteins and polypeptides. I. Extension of the
solvent perturbation technique of difference spectroscopy to the study of
proteins and polypeptides in organic solvents
AU Herskovits, Theodore T.
CS U.S. Dept. of Agr., Philadelphia, PA
SO J. Biol. Chem. (1965), 240(2), 628-38
DT Journal
LA English

L3 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 1964:83169 CAPLUS
DN 60:83169
OREF 60:14604a-d

TI Linear polymerization of the S-sulfonate of the B-chain of ***insulin***
. IV. Influence of some organic substances
AU Hsien, Lu Tzu
CS Acad. Sinica, Shanghai, Peop. Rep. China
SO Sheng Wu Hua Hsueh Yu Sheng Wu Wu Li Pao (1963), 3(4), 434-41
DT Journal
LA Unavailable

L3 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2003 ACS
AN 1962:40282 CAPLUS
DN 56:40282
OREF 56:7673i,7674a-d

TI Ultraviolet difference spectra of proteins and polypeptides
AU Glazer, A. N.; Smith, Emil L.
CS Univ. of Utah, Salt Lake City
SO J. Biol. Chem. (1961), 236, 2942-7
DT Journal
LA Unavailable

=> file MEDLINE

=> s human insulin precursor

8003353 HUMAN

108672 HUMANS

8024429 HUMAN

(HUMAN OR HUMANS)

197338 INSULIN

1266 INSULINS

197352 INSULIN

(INSULIN OR INSULINS)

60418 PRECURSOR

61005 PRECURSORS

107445 PRECURSOR

(PRECURSOR OR PRECURSORS)

L4 7 HUMAN INSULIN PRECURSOR

(HUMAN(W)INSULIN(W)PRECURSOR)

=> D L4 1-7

L4 ANSWER 1 OF 7 MEDLINE

AN 2001240445 MEDLINE

DN 21223036 PubMed ID: 11322940

TI Gene therapy for streptozotocin-induced diabetic mice by electroporational
transfer of naked ***human*** ***insulin*** ***precursor***
DNA into skeletal muscle in vivo.

AU Yin D; Tang J G

CS National Laboratory of Protein Engineering and Plant Genetic Engineering,
College of Life Sciences, Peking University, 100871, Beijing, PR China.

SO FEBS LETTERS, (2001 Apr 20) 495 (1-2) 16-20.

Journal code: 0155157. ISSN: 0014-5793.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200105
ED Entered STN: 20010529
Last Updated on STN: 20010529
Entered Medline: 20010521

L4 ANSWER 2 OF 7 MEDLINE
AN 2001012383 MEDLINE
DN 20335834 PubMed ID: 10879487
TI Use of Bacillus brevis for synthesis and secretion of Des-B30 single-chain
human ***insulin*** ***precursor*** .
AU Koh M; Hanagata H; Ebisu S; Morihara K; Takagi H
CS Institute for Applied Life Science, University of East Asia, Graduate
School, Shimonoseki-shi, Yamaguchi, Japan.
SO BIOSCIENCE, BIOTECHNOLOGY, AND BIOCHEMISTRY, (2000 May) 64 (5) 1079-81.
Journal code: 9205717. ISSN: 0916-8451.

CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200010
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001031

L4 ANSWER 3 OF 7 MEDLINE
AN 2000256149 MEDLINE
DN 20256149 PubMed ID: 10798291
TI New strategy for the design of ligands for the purification of
pharmaceutical proteins by affinity chromatography.
AU Sproule K; Morrill P; Pearson J C; Burton S J; Hejnaes K R; Valore H;
Ludvigsen S; Lowe C R
CS Institute of Biotechnology, University of Cambridge, UK.
SO JOURNAL OF CHROMATOGRAPHY. B, BIOMEDICAL SCIENCES AND APPLICATIONS, (2000
Mar 31) 740 (1) 17-33.
Journal code: 9714109. ISSN: 1387-2273.

CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200006
ED Entered STN: 20000706
Last Updated on STN: 20000706
Entered Medline: 20000623

L4 ANSWER 4 OF 7 MEDLINE
AN 96112668 MEDLINE
DN 96112668 PubMed ID: 8579343
TI Preparation of Tyr-C-peptide from genetically altered ***human***
insulin ***precursor*** .
AU Sun H; Tang J; Hu M
CS Department of Biochemistry and Molecular Biology, College of Life
Sciences, Peking University, Beijing, China.
SO APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, (1995 Dec) 55 (3) 167-74.
Journal code: 8208561. ISSN: 0273-2289.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199603
ED Entered STN: 19960321
Last Updated on STN: 20000303
Entered Medline: 19960311

L4 ANSWER 5 OF 7 MEDLINE
AN 96043915 MEDLINE
DN 96043915 PubMed ID: 7581003
TI Recombinant A17 Lys human insulin: purification and characterization.
AU Zhang B Y; Zhang Y S; Cai R R; Feng Y M; He Q B
CS State Key Laboratory of Molecular Biology, Shanghai Institute of
Biochemistry, China.
SO BIOCHEMISTRY AND MOLECULAR BIOLOGY INTERNATIONAL, (1995 Aug) 36 (5)
1079-85.
Journal code: 9306673. ISSN: 1039-9712.

CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199512
ED Entered STN: 19960124
Last Updated on STN: 20000303
Entered Medline: 19951222

L4 ANSWER 6 OF 7 MEDLINE
AN 95397589 MEDLINE
DN 95397589 PubMed ID: 7668041
TI Host cell properties and external pH affect proinsulin production by
Saccharomyces yeast.
AU Kozlov D G; Prahl N; Efremov B D; Peters L; Wambut R; Karpichev I V;
Eldarov M A; Benevolensky S V
CS Institute of Genetics and Selection of Industrial Microorganisms, Moscow,
Russia.
SO YEAST, (1995 Jun 30) 11 (8) 713-24.
Journal code: 8607637. ISSN: 0749-503X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199510
ED Entered STN: 19951020
Last Updated on STN: 19951020
Entered Medline: 19951012

L4 ANSWER 7 OF 7 MEDLINE
AN 88041119 MEDLINE
DN 88041119 PubMed ID: 3118367
TI Sequence of a New world primate insulin having low biological potency and
immunoreactivity.
AU Seino S; Steiner D F; Bell G I
CS Howard Hughes Medical Institute, University of Chicago, IL 60637.
NC DK-13914 (NIDDK)
DK-20595 (NIDDK)
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
AMERICA, (1987 Nov) 84 (21) 7423-7.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-J02989
EM 198712
ED Entered STN: 19900305
Last Updated on STN: 20000303
Entered Medline: 19871209

=> S urea AND insulin

55067 UREA
446 UREAS
55256 UREA
(UREA OR UREAS)

197338 INSULIN
1266 INSULINS
197352 INSULIN
(INSULIN OR INSULINS)

L5 1913 UREA AND INSULIN

=> S L5 AND precursor

60418 PRECURSOR
61005 PRECURSORS
107445 PRECURSOR
(PRECURSOR OR PRECURSORS)

L6 23 L5 AND PRECURSOR

=> D L6 1-23

L6 ANSWER 1 OF 23 MEDLINE
AN 2002150074 MEDLINE
DN 21876925 PubMed ID: 11882926
TI Circulating transforming growth factor beta1 (TGFbeta1) is elevated by

extensive exercise.

AU Hering S; Jost C; Schulz R; Hellmich B; Schatz H; Pfeiffer
 CS Department of Internal Medicine, University-Hospital, BG-Clinic
 "Bergmannsheil", Ruhr-University Bochum, 44789 Bochum, Germany..
 steffen.hering@ruhr-uni-bochum.de

SO Eur J Appl Physiol, (2002 Mar) 86 (5) 406-10.
 Journal code: 100954790. ISSN: 1439-6319.

CY Germany; Germany, Federal Republic of
 DT (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)

LA English
 FS Priority Journals
 EM 200208
 ED Entered STN: 20020308
 Last Updated on STN: 20030105
 Entered Medline: 20020828

L6 ANSWER 2 OF 23 MEDLINE
 AN 2002000655 MEDLINE
 DN 21626340 PubMed ID: 11754524
 TI Disorders of glutamate metabolism.
 AU Kelly A; Stanley C A
 CS Division of Endocrinology, Department of Pediatrics, The Children's
 Hospital of Philadelphia, University of Pennsylvania Medical School,
 19104, USA.

NC M01 RR 00240 (NCRR)
 R01 DK 53012 (NIDDK)
 R01 DK 56268 (NIDDK)
 T32DK 07314 (NIDDK)

SO MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES RESEARCH REVIEWS, (2001)
 7 (4) 287-95. Ref: 89
 Journal code: 9517974. ISSN: 1080-4013.

CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, TUTORIAL)

LA English
 FS Priority Journals
 EM 200203
 ED Entered STN: 20020102
 Last Updated on STN: 20020307
 Entered Medline: 20020306

L6 ANSWER 3 OF 23 MEDLINE
 AN 2001297184 MEDLINE
 DN 21272036 PubMed ID: 11378667
 TI Rat liver responsiveness to gluconeogenic substrates during
 insulin -induced hypoglycemia.

AU de Souza H M; Borba-Murad G R; Ceddia R B; Curi R; Vardanega-Peicher M;
 Bazotte R B
 CS Departamento de Ciencias Fisiologicas, Universidade Estadual de Londrina,
 Londrina, PR, Brazil.

SO BRAZILIAN JOURNAL OF MEDICAL AND BIOLOGICAL RESEARCH, (2001 Jun) 34 (6)
 771-7.
 Journal code: 8112917. ISSN: 0100-879X.

CY Brazil
 DT Journal; Article; (JOURNAL ARTICLE)

LA English
 FS Priority Journals
 EM 200108
 ED Entered STN: 20010806
 Last Updated on STN: 20010806
 Entered Medline: 20010802

L6 ANSWER 4 OF 23 MEDLINE
 AN 1999436092 MEDLINE
 DN 99436092 PubMed ID: 10506142
 TI Studies of hepatic glutamine metabolism in the perfused rat liver with
 (15)N-labeled glutamine.

AU Nissim I; Brosnan M E; Yudkoff M; Brosnan J T
 CS Division of Child Development, Department of Pediatrics, University of
 Pennsylvania School of Medicine, Philadelphia, Pennsylvania 19104, USA.

NC DK-53761 (NIDDK)
 HD-34900 (NICHD)
 NS-37915 (NINDS)

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1999 Oct 8) 274 (41) 28958-65.

Journal code: 2985121R. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199911
ED Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991109

L6 ANSWER 5 OF 23 MEDLINE
AN 1999354446 MEDLINE
DN 99354446 PubMed ID: 10425714
TI Effect of gastric inhibitory polypeptide on bovine fat metabolism.
AU Dawson J M; Greathead H M; Sessions V A; Tye F M; Buttery P J
CS Division of Nutritional Biochemistry, School of Biological Sciences,
University of Nottingham, Loughborough, Leics, UK..
janet.dawson@nottingham.ac.uk
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. PART B, BIOCHEMISTRY AND
MOLECULAR BIOLOGY, (1999 May) 123 (1) 79-88.
Journal code: 9516061. ISSN: 1096-4959.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199911
ED Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991103

L6 ANSWER 6 OF 23 MEDLINE
AN 1999116886 MEDLINE
DN 99116886 PubMed ID: 9920158
TI Glucagon-like peptide-1 has no ***insulin*** -like effects in
insulin -dependent diabetic dogs maintained normoglycemic and
normoinsulinemic.
AU Freyse E J; Knospe S; Becher T; El Hag O; Goke B; Fischer U
CS Diabetes Institute Gerhardt Katsch, Karlsburg, Germany.
SO METABOLISM: CLINICAL AND EXPERIMENTAL, (1999 Jan) 48 (1) 134-7.
Journal code: 0375267. ISSN: 0026-0495.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199902
ED Entered STN: 19990216
Last Updated on STN: 19990216
Entered Medline: 19990204

L6 ANSWER 7 OF 23 MEDLINE
AN 97278973 MEDLINE
DN 97278973 PubMed ID: 9133550
TI Blood glucose lowering and glucagonostatic effects of glucagon-like
peptide I in ***insulin*** -deprived diabetic dogs.
AU Freyse E J; Becher T; El-Hag O; Knospe S; Goke B; Fischer U
CS Gerhardt Katsch Institute of Diabetes Karlsburg of the Ernst Moritz Arndt
University, Greifswald, Germany.. diabetes@diabetes.medizin.uni-
greifswald.d400.de
SO DIABETES, (1997 May) 46 (5) 824-8.
Journal code: 0372763. ISSN: 0012-1797.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199705
ED Entered STN: 19970609
Last Updated on STN: 19970609
Entered Medline: 19970528

L6 ANSWER 8 OF 23 MEDLINE
AN 97094892 MEDLINE
DN 97094892 PubMed ID: 8940126
TI Regulation of [15N] ***urea*** synthesis from [5-15N]glutamine. Role of
pH, hormones, and pyruvate.
AU Nissim I; Yudkoff M; Brosnan J T
CS Division of Biochemical Development, The Children's Hospital of

NC Philadelphia, Philadelphia Pennsylvania, USA.
 SO DK-39348 (NIDDK)
 JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Dec 6) 271 (49) 31234-42.
 CY Journal code: 2985121R. ISSN: 0021-9258.
 DT United States
 LA Journal; Article; (JOURNAL ARTICLE)
 FS English
 EM Priority Journals
 ED 199701
 Entered STN: 19970128
 Last Updated on STN: 19980206
 Entered Medline: 19970109

L6 ANSWER 9 OF 23 MEDLINE
 AN 95250697 MEDLINE
 DN 95250697 PubMed ID: 7733029
 TI whole-body protein turnover in response to hyperinsulinemia in humans
 postabsorptively with [15N]glycine as tracer.
 AU Ang B C; Halliday D; Powell-Tuck J
 CS Department of Human Nutrition, London Hospital Medical College, UK.
 SO AMERICAN JOURNAL OF CLINICAL NUTRITION, (1995 May) 61 (5) 1062-6.
 CY Journal code: 0376027. ISSN: 0002-9165.
 DT United States
 (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 (RANDOMIZED CONTROLLED TRIAL)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199505
 ED Entered STN: 19950608
 Last Updated on STN: 19950608
 Entered Medline: 19950530

L6 ANSWER 10 OF 23 MEDLINE
 AN 94331380 MEDLINE
 DN 94331380 PubMed ID: 8054322
 TI The effects of energy source and tryptophan on the rate of protein
 synthesis and on hormones of the entero-insular axis in the piglet.
 AU Ponter A A; Cortamira N O; Seve B; Salter D N; Morgan L M
 CS Institute of Grassland and Environmental Research, Shinfield, Reading.
 SO BRITISH JOURNAL OF NUTRITION, (1994 May) 71 (5) 661-74.
 CY Journal code: 0372547. ISSN: 0007-1145.
 DT ENGLAND: United Kingdom
 Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199409
 ED Entered STN: 19940920
 Last Updated on STN: 19980206
 Entered Medline: 19940915

L6 ANSWER 11 OF 23 MEDLINE
 AN 94171129 MEDLINE
 DN 94171129 PubMed ID: 8125389
 TI Can arginine and ornithine support gut functions?.
 AU Cynober L
 CS Laboratoire de Biochimie, Hopital Saint-Antoine, Paris, France.
 SO GUT, (1994 Jan) 35 (1 Suppl) S42-5. Ref: 42
 CY Journal code: 2985108R. ISSN: 0017-5749.
 DT ENGLAND: United Kingdom
 Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, TUTORIAL)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199404
 ED Entered STN: 19940420
 Last Updated on STN: 19940420
 Entered Medline: 19940414

L6 ANSWER 12 OF 23 MEDLINE
 AN 92048550 MEDLINE
 DN 92048550 PubMed ID: 1943749
 TI Glucose infusion improves endogenous protein synthesis efficiency in
 multiple trauma victims.
 AU Jeevanandam M; Leland D; Shamos R F; Casano S F; Schiller W R

CS Trauma Center, St. Joseph's Hospital and Medical Center, Phoenix, AZ
85013.
SO METABOLISM: CLINICAL AND EXPERIMENTAL, (1991 Nov) 40 (11) 1199-206.
Journal code: 0375267. ISSN: 0026-0495.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199112
ED Entered STN: 19920124
Last Updated on STN: 19920124
Entered Medline: 19911212

L6 ANSWER 13 OF 23 MEDLINE
AN 91231836 MEDLINE
DN 91231836 PubMed ID: 2030330
TI Effects of truncated glucagon-like peptide-1 on the responses of starved
sheep to glucose.
AU Faulkner A; Pollock H T
CS Hannah Research Institute, Ayr.
SO JOURNAL OF ENDOCRINOLOGY, (1991 Apr) 129 (1) 55-8.
Journal code: 0375363. ISSN: 0022-0795.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199106
ED Entered STN: 19910707
Last Updated on STN: 19910707
Entered Medline: 19910618

L6 ANSWER 14 OF 23 MEDLINE
AN 91155743 MEDLINE
DN 91155743 PubMed ID: 2000038
TI Hepatic uptake and release of glucose, lactate, and amino acids in acutely
uremic dogs.
AU Cianciaruso B; Bellizzi V; Napoli R; Sacca L; Kopple J D
CS Department of Internal Medicine, II School of Medicine, University of
Naples, Italy.
SO METABOLISM: CLINICAL AND EXPERIMENTAL, (1991 Mar) 40 (3) 261-9.
Journal code: 0375267. ISSN: 0026-0495.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199104
ED Entered STN: 19910428
Last Updated on STN: 19970203
Entered Medline: 19910411

L6 ANSWER 15 OF 23 MEDLINE
AN 90164752 MEDLINE
DN 90164752 PubMed ID: 2407133
TI The relationship between gluconeogenic substrate supply and glucose
production in humans.
AU Jahoor F; Peters E J; Wolfe R R
CS Shriners Burns Institute, Galveston, Texas.
NC 00073 (NIDDK)
DK-33952
SO AMERICAN JOURNAL OF PHYSIOLOGY, (1990 Feb) 258 (2 Pt 1) E288-96.
Journal code: 0370511. ISSN: 0002-9513.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199003
ED Entered STN: 19900601
Last Updated on STN: 19980206
Entered Medline: 19900328

L6 ANSWER 16 OF 23 MEDLINE
AN 85226457 MEDLINE
DN 85226457 PubMed ID: 3890950
TI Expression of carbamoyl-phosphate synthetase I mRNA in Reuber hepatoma
H-35 cells. Regulation by glucocorticoid and ***insulin*** .
AU Kitagawa Y; Ryall J; Nguyen M; Shore G C

SO BIOCHIMICA ET BIOPHYSICA ACTA, (1985 Jun 24) 825 (2) 148-53
 Journal code: 0217513. ISI 0006-3002.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198508
 ED Entered STN: 19900320
 Last Updated on STN: 19980206
 Entered Medline: 19850814

L6 ANSWER 17 OF 23 MEDLINE
 AN 84243785 MEDLINE
 DN 84243785 PubMed ID: 6376914
 TI Muscle protein turnover in uremia.
 AU Mitch W E; Clark A S
 NC AM 00750 (NIADDK)
 AM 06660 (NIADDK)
 AM 26903 (NIADDK)
 SO KIDNEY INTERNATIONAL. SUPPLEMENT, (1983 Dec) 16 S2-8. Ref: 77
 Journal code: 7508622. ISSN: 0098-6577.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LA English
 FS Priority Journals
 EM 198408
 ED Entered STN: 19900320
 Last Updated on STN: 19970203
 Entered Medline: 19840815

L6 ANSWER 18 OF 23 MEDLINE
 AN 84081902 MEDLINE
 DN 84081902 PubMed ID: 6690052
 TI Flux of amino acids across the leg in weight-losing cancer patients.
 AU Bennegard K; Lindmark L; Eden E; Svaninger G; Lundholm K
 SO CANCER RESEARCH, (1984 Jan) 44 (1) 386-93.
 Journal code: 2984705R. ISSN: 0008-5472.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198402
 ED Entered STN: 19900319
 Last Updated on STN: 19900319
 Entered Medline: 19840214

L6 ANSWER 19 OF 23 MEDLINE
 AN 82165882 MEDLINE
 DN 82165882 PubMed ID: 7040193
 TI Effects of peptide hormones on ***urea*** - and glycogen-synthesis of
 isolated hepatocytes and the influence of a toxic factor from burnt mouse
 and human skin.
 AU Scholmerich J; Kremer B; Schmidt K; Setyadharma H; Richter I E;
 Schoenenberger G A
 SO HORMONE AND METABOLIC RESEARCH, (1982 Feb) 14 (2) 80-4.
 Journal code: 0177722. ISSN: 0018-5043.
 CY GERMANY, WEST: Germany, Federal Republic of
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198206
 ED Entered STN: 19900317
 Last Updated on STN: 19900317
 Entered Medline: 19820614

L6 ANSWER 20 OF 23 MEDLINE
 AN 79151110 MEDLINE
 DN 79151110 PubMed ID: 372192
 TI Proinsulin ***precursors*** in catfish pancreatic islets.
 AU Albert S G; Permutt M A
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1979 May 10) 254 (9) 3483-92.
 Journal code: 2985121R. ISSN: 0021-9258.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English

FS Priority Journals
EM 197906
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790629

L6 ANSWER 21 OF 23 MEDLINE
AN 77118909 MEDLINE
DN 77118909 PubMed ID: 190261
TI Characteristics of high molecular weight ***insulins*** in insulinoma patients.
AU Permutt M; Biesbroeck J; Chyn R
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1977 Mar) 44 (3) 536-44.
Journal code: 0375362. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197704
ED Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19770425

L6 ANSWER 22 OF 23 MEDLINE
AN 75115098 MEDLINE
DN 75115098 PubMed ID: 234976
TI Chromatographic heterogeneity of ***insulin*** extracted from insulomas.
AU Beischer W; Melani F; Keller L; Pfeiffer E F
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1975 Mar) 40 (3) 393-400.
Journal code: 0375362. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197505
ED Entered STN: 19900310
Last Updated on STN: 19950206
Entered Medline: 19750528

L6 ANSWER 23 OF 23 MEDLINE
AN 64098616 MEDLINE
DN 64098616
TI STRUCTURE OF PROTEINS.
AU RICHARDS F M
SO ANN REV BIOCHEM, (1963) 32 269-300.
CY United States
DT Journal
LA English
FS OLDMEDLINE
EM 196408
ED Entered STN: 19990716
Last Updated on STN: 19990716
STN INTERNATIONAL LOGOFF AT 16:51:06 ON 05 MAR 2003

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=> file CAPLUS

=> s insulin AND proinsulin AND intramolecular chaperone
L1 2 INSULIN AND PROINSULIN AND INTRAMOLECULAR CHAPERONE

=> D L1 1-2

L1 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
AN 2002:576773 CAPLUS
DN 137:274734
TI Acidic residues on the N-terminus of ***proinsulin*** C-peptide are
important for the folding of ***insulin*** precursor
AU Chen, Li-Ming; Yang, Xing-Wen; Tang, Jian-Guo
CS National Laboratory of Protein Engineering and Plant Genetic Engineering
College of Life Sciences, Peking University, Beijing, 100871, Peop. Rep.
China
SO Journal of Biochemistry (Tokyo, Japan) (2002), 131(6), 855-859
CODEN: JOBIAO; ISSN: 0021-924X
PB Japanese Biochemical Society
DT Journal
LA English
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 2 MEDLINE
AN 2002299024 MEDLINE
DN 22035558 PubMed ID: 12038982
TI Acidic residues on the N-terminus of ***proinsulin*** C-Peptide are
important for the folding of ***insulin*** precursor.
AU Chen Li-Ming; Yang Xing-Wen; Tang Jian-Guo
CS National Laboratory of Protein Engineering and Plant Genetic Engineering,
College of Life Sciences, Peking University, Beijing, People's Republic of
China.
SO JOURNAL OF BIOCHEMISTRY, (2002 Jun) 131 (6) 855-9.
Journal code: 0376600. ISSN: 0021-924X.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200301
ED Entered STN: 20020602
Last Updated on STN: 20030103
Entered Medline: 20030102

=> s intramolecular chaperone
L2 164 INTRAMOLECULAR CHAPERONE

=> S L2 AND human growth hormone
L3 0 L2 AND HUMAN GROWTH HORMONE

=> S L2 AND hGH
L4 0 L2 AND HGH

=> S human growth hormone
L5 12056 HUMAN GROWTH HORMONE

=> s human growth hormone OR hGH
L6 14375 HUMAN GROWTH HORMONE OR HGH

=> S L6 AND insulin
L7 3534 L6 AND INSULIN

=> S L6 AND proinsulin
L8 70 L6 AND PROINSULIN

=> s L8 AND urea
L9 2 L8 AND UREA

=> D L9 1-2

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
 AN 1999:640887 CAPLUS
 DN 131:267960
 TI Manufacture of proteins as fusion products with peptides that promoter
 protein folding and the manufacture of correctly-folded proteins
 IN Gan, Zhongru
 PA Tonghua Gantech Biotechnology Ltd., Peop. Rep. China
 SO PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9950302	A1	19991007	WO 1998-CN52	19980331
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2324513	AA	19991007	CA 1998-2324513	19980331
	AU 9867164	A1	19991018	AU 1998-67164	19980331
	BR 9815788	A	20001128	BR 1998-15788	19980331
	EP 1066328	A1	20010110	EP 1998-912192	19980331
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 2002164712	A1	20021107	US 2002-54873	20020122
PRAI	WO 1998-CN52	A	19980331		
	US 2000-423100	A1	20001211		
RE.CNT	2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L9 ANSWER 2 OF 2 MEDLINE
 AN 83186637 MEDLINE
 DN 83186637 PubMed ID: 400741
 TI Partial purification, characterization, and assay of a slightly acidic
 insulin-like peptide (ILAs) from human plasma.
 AU Posner B I; Guyda H J; Corvol M T; Rappaport R; Harley C; Goldstein S
 SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1978 Dec) 47 (6)
 1240-50.
 Journal code: 0375362. ISSN: 0021-972X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 198306
 ED Entered STN: 19900318
 Last Updated on STN: 19900318
 Entered Medline: 19830617

=> file MEDLINE
 => s hGH OR human growth hormone
 3268 HGH
 16 HGHS
 3271 HGH
 (HGH OR HGHS)
 8005805 HUMAN
 108734 HUMANS
 8026892 HUMAN
 (HUMAN OR HUMANS)
 657726 GROWTH
 1352 GROWTHS
 658751 GROWTH
 (GROWTH OR GROWTHS)
 212139 HORMONE
 175587 HORMONES
 329436 HORMONE
 (HORMONE OR HORMONES)
 5370 HUMAN GROWTH HORMONE
 (HUMAN(W)GROWTH(W)HORMONE)
 L10 6777 HGH OR HUMAN GROWTH HORMONE

=> S L10 AND insulin
197381 INSULIN
1266 INSULINS
197395 INSULIN
(INSULIN OR INSULINS)
L11 1826 L10 AND INSULIN

=> S L11 AND chaotropic
778 CHAOTROPIC
1 CHAOTROPICS
778 CHAOTROPIC
(CHAOTROPIC OR CHAOTROPICS)
L12 0 L11 AND CHAOTROPIC

=> S chaotropic agent
778 CHAOTROPIC
1 CHAOTROPICS
778 CHAOTROPIC
(CHAOTROPIC OR CHAOTROPICS)
149324 AGENT
729173 AGENTS
825656 AGENT
(AGENT OR AGENTS)
L13 330 CHAOTROPIC AGENT
(CHAOTROPIC(W)AGENT)

=> S L13 AND L10
L14 0 L13 AND L10

=> S urea OR mercaptan
55083 UREA
446 UREAS
55272 UREA
(UREA OR UREAS)
281 MERCAPTAN
166 MERCAPTANS
432 MERCAPTAN
(MERCAPTAN OR MERCAPTANS)
L15 55699 UREA OR MERCAPTAN

=> S L15 AND hGH
3268 HGH
16 HGHS
3271 HGH
(HGH OR HGHS)
L16 37 L15 AND HGH

=> D L16 1-37

L16 ANSWER 1 OF 37 MEDLINE
AN 2002508769 MEDLINE
DN 21692761 PubMed ID: 12332922
TI Suppression of growth hormone-dependent human serum sulfation factor by
estrogen.
AU Wiedemann E; Schwartz E
SO J Clin Endocrinol, (1972 January) 34 51-8.
Journal code: 17840150R. ISSN: 0368-1610.
Report No.: PIP-720447; POP-00017253.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Population
EM 198001
ED Entered STN: 20021101
Last Updated on STN: 20021101
Entered Medline: 19800103

L16 ANSWER 2 OF 37 MEDLINE
AN 2000472300 MEDLINE
DN 20346623 PubMed ID: 10890569
TI Recombinant prolactin receptor extracellular domain of rainbow trout
(Oncorhynchus mykiss): subcloning, preparation, and characterization.
AU Sandowski Y; Cohen Y; Le Rouzic P; Bignon C; Rentier-Delrue F; Djiane J;
Prunet P; Gertler A
CS Institute of Biochemistry, Food Science and Nutrition, Faculty of

Agricultural, Food and Environmental Quality Sciences, The Hebrew
 University of Jerusalem, Rehovot, Israel.
 SO GENERAL AND COMPARATIVE ENDOCRINOLOGY, (2000 May) 118 (2) 302-9.
 Journal code: 0370735. ISSN: 0016-6480.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200010
 ED Entered STN: 20001012
 Last Updated on STN: 20001012
 Entered Medline: 20001002

L16 ANSWER 3 OF 37 MEDLINE
 AN 2000252155 MEDLINE
 DN 20252155 PubMed ID: 10794181
 TI Recombinant extracellular domain of rabbit growth hormone receptor and
 biological activity of somatogenic hormones.
 AU Sakal E; Chapnik-Cohen N; Belair L; Djiane J; Gertler A
 CS Institute of Biochemistry, Food Science and Nutrition, Faculty of
 Agricultural, Food, and Environmental Quality Sciences, The Hebrew
 University of Jerusalem, Rehovot, Israel.
 SO PREPARATIVE BIOCHEMISTRY AND BIOTECHNOLOGY, (2000 May) 30 (2) 107-23.
 Journal code: 9607037. ISSN: 1082-6068.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200007
 ED Entered STN: 20000810
 Last Updated on STN: 20000810
 Entered Medline: 20000726

L16 ANSWER 4 OF 37 MEDLINE
 AN 2000153321 MEDLINE
 DN 20153321 PubMed ID: 10686149
 TI Optimization of inclusion body solubilization and renaturation of
 recombinant human growth hormone from Escherichia coli.
 AU Patra A K; Mukhopadhyay R; Mukhija R; Krishnan A; Garg L C; Panda A K
 CS Product Development Cell, Gene Regulation Laboratory, National Institute
 of Immunology, Aruna Asaf Ali Marg, New Delhi, 110067, India.
 SO PROTEIN EXPRESSION AND PURIFICATION, (2000 Mar) 18 (2) 182-92.
 Journal code: 9101496. ISSN: 1046-5928.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200005
 ED Entered STN: 20000518
 Last Updated on STN: 20000518
 Entered Medline: 20000509

L16 ANSWER 5 OF 37 MEDLINE
 AN 1998021151 MEDLINE
 DN 98021151 PubMed ID: 9380235
 TI IGF-I/IGFBP-1 as an index for discrimination between responder and
 nonresponder to recombinant human growth hormone in malnourished uremic
 patients on hemodialysis.
 AU Shinobe M; Sanaka T; Nihei H; Sugino N
 CS Department of Medicine, Tokyo Women's Medical College, Japan.
 SO NEPHRON, (1997) 77 (1) 29-36.
 Journal code: 0331777. ISSN: 0028-2766.
 CY Switzerland
 DT (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199711
 ED Entered STN: 19971224
 Last Updated on STN: 19971224
 Entered Medline: 19971110

L16 ANSWER 6 OF 37 MEDLINE
 AN 96261864 MEDLINE
 DN 96261864 PubMed ID: 8777919
 TI The effect of human growth hormone therapy on L-(methyl-2H3)-leucine

turnover and urinary pseudouridine concentration in patients with Ullrich-Turner syndrome.

AU Bohles H; Brendel L; Forster H; Trager K; Vogt J; Georgieff M
 CS Zentrum der Kinderheilkunde, Klinikum der Johann Wolfgang
 Goethe-Universität, Frankfurt/Main, Germany.
 SO EUROPEAN JOURNAL OF PEDIATRICS, (1996 Apr) 155 (4) 275-80.
 Journal code: 7603873. ISSN: 0340-6199.
 CY GERMANY: Germany, Federal Republic of
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199609
 ED Entered STN: 19960924
 Last Updated on STN: 19960924
 Entered Medline: 19960917

L16 ANSWER 7 OF 37 MEDLINE
 AN 96227605 MEDLINE
 DN 96227605 PubMed ID: 8674857
 TI Preparation and characterization of recombinant prolactin receptor extracellular domain from rat.
 AU Sandowski Y; Nagano M; Bignon C; Djiane J; Kelly P A; Gertler A
 CS Department of Biochemistry, Food Science and Nutrition, Faculty of Agriculture, Hebrew University of Jerusalem, Rehovot, Israel.
 SO MOLECULAR AND CELLULAR ENDOCRINOLOGY, (1995 Nov 30) 115 (1) 1-11.
 Journal code: 7500844. ISSN: 0303-7207.
 CY Ireland
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199608
 ED Entered STN: 19960822
 Last Updated on STN: 19970203
 Entered Medline: 19960809

L16 ANSWER 8 OF 37 MEDLINE
 AN 95264383 MEDLINE
 DN 95264383 PubMed ID: 7538170
 TI Resistance of nitrogen metabolism to growth hormone treatment in the early phase after injury of patients with multiple injuries.
 AU Roth E; Valentini L; Semsroth M; Holzenbein T; Winkler S; Blum W F; Ranke M B; Schemper M; Hammerle A; Karner J
 CS Surgical Department, University of Vienna, Austria.
 SO JOURNAL OF TRAUMA, (1995 Jan) 38 (1) 136-41.
 Journal code: 0376373. ISSN: 0022-5282.
 CY United States
 DT (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 (RANDOMIZED CONTROLLED TRIAL)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199506
 ED Entered STN: 19950621
 Last Updated on STN: 19960129
 Entered Medline: 19950615

L16 ANSWER 9 OF 37 MEDLINE
 AN 94003922 MEDLINE
 DN 94003922 PubMed ID: 8400793
 TI [Effects of short-term application of recombinant human growth hormone on ***urea*** production rate in patients in the early postoperative phase].
 Effekte einer kurzzeitigen Applikation von rekombinantem humanem Wachstumshormon auf die Harnstoffproduktionsrate von Patienten in der frühen postoperativen Phase.
 AU Gottardis M; Gruber E; Benzer A; Murr C; Schmoigl C; Hackl J M; Balogh D
 CS Universitätsklinik für Anästhesie und Allgemeine Intensivmedizin, Innsbruck, Österreich.
 SO INFUSIONSTHERAPIE UND TRANSFUSIONSMEDIZIN, (1993 Aug) 20 (4) 142-7.
 Journal code: 9209406. ISSN: 1019-8466.
 CY Switzerland
 DT (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 (RANDOMIZED CONTROLLED TRIAL)
 LA German
 FS Priority Journals

EM 199311
ED Entered STN: 19940117
Last Updated on STN: 19940117
Entered Medline: 19931123

L16 ANSWER 10 OF 37 MEDLINE
AN 93136795 MEDLINE
DN 93136795 PubMed ID: 1486334
TI Effects of insulin-like growth factor I or human growth hormone in fasted rats.
AU Asakawa K; Hizuka N; Takano K; Horikawa R; Sukegawa I; Demura H; Shizume K
CS Department of Medicine, Tokyo Women's Medical College, Japan.
SO GROWTH REGULATION, (1992 Mar) 2 (1) 40-4.
Journal code: 9106990. ISSN: 0956-523X.
CY SCOTLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199302
ED Entered STN: 19930312
Last Updated on STN: 19930312
Entered Medline: 19930225

L16 ANSWER 11 OF 37 MEDLINE
AN 92285829 MEDLINE
DN 92285829 PubMed ID: 1598669
TI Decreased growth hormone levels in the catabolic phase of severe injury.
AU Jeevanandam M; Ramias L; Shamos R F; Schiller W R
CS Trauma Center, St. Joseph's Hospital and Medical Center, Phoenix, Ariz. 85013.
SO SURGERY, (1992 May) 111 (5) 495-502.
Journal code: 0417347. ISSN: 0039-6060.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199207
ED Entered STN: 19920717
Last Updated on STN: 19920717
Entered Medline: 19920709

L16 ANSWER 12 OF 37 MEDLINE
AN 92227294 MEDLINE
DN 92227294 PubMed ID: 1808366
TI Improvement of malnutrition indices in adult patients with end stage renal disease by recombinant human growth hormone.
AU Sanaka T; Sugino N
CS Department of Medicine, Kidney Center, Tokyo Women's Medical College.
SO NIPPON JINZO GAKKAI SHI. JAPANESE JOURNAL OF NEPHROLOGY, (1991 Nov) 33 (11) 1153-9.
Journal code: 7505731. ISSN: 0385-2385.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 199205
ED Entered STN: 19920607
Last Updated on STN: 19920607
Entered Medline: 19920518

L16 ANSWER 13 OF 37 MEDLINE
AN 92217902 MEDLINE
DN 92217902 PubMed ID: 1806470
TI Combination ultrafiltration and 6 M ***urea*** treatment of human growth hormone effectively minimizes risk from potential Creutzfeldt-Jakob disease virus contamination.
AU Pocchiari M; Peano S; Conz A; Eshkol A; Maillard F; Brown P; Gibbs C J Jr; Xi Y G; Tenham-Fisher E; Macchi G
CS Dipartimento di Biologia, Universita di Lecce, Italia.
SO HORMONE RESEARCH, (1991) 35 (3-4) 161-6.
Journal code: 0366126. ISSN: 0301-0163.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199205

ED Entered STN: 19920529
Last Updated on STN: 19920529
Entered Medline: 19920514

L16 ANSWER 14 OF 37 MEDLINE
AN 91306714 MEDLINE
DN 91306714 PubMed ID: 1853714
TI Potential effects of recombinant human growth hormone (r- ***hGH***) on somatic growth in uremic rats.
AU Kawaguchi H; Komatsu Y; Hattori M; Ito K; Hizuka N; Takano K
CS Department of Pediatric Nephrology, Tokyo women's Medical College, Japan.
SO ACTA PAEDIATRICA JAPONICA, (1991 Feb) 33 (1) 6-14.
Journal code: 0370357. ISSN: 0374-5600.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199108
ED Entered STN: 19910908
Last Updated on STN: 19910908
Entered Medline: 19910822

L16 ANSWER 15 OF 37 MEDLINE
AN 91155752 MEDLINE
DN 91155752 PubMed ID: 2000045
TI Growth hormone improves muscle protein metabolism and whole body nitrogen economy in man during a hyponitrogenous diet.
AU Lundeborg S; Belfrage M; Wernerman J; von der Decken A; Thunell S; Vinnars E
CS Department of Anesthesiology, St Goran's Hospital, Stockholm, Sweden.
SO METABOLISM:CLINICAL AND EXPERIMENTAL, (1991 Mar) 40 (3) 315-22.
Journal code: 0375267. ISSN: 0026-0495.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 199104
ED Entered STN: 19910428
Last Updated on STN: 19950206
Entered Medline: 19910411

L16 ANSWER 16 OF 37 MEDLINE
AN 90242861 MEDLINE
DN 90242861 PubMed ID: 2185939
TI Radioiodination of peptide hormones and immunoglobulin preparations: comparison of the chloramine T and iodogen method.
AU woltanski K P; Besch W; Keilacker H; Ziegler M; Kohnert K D
CS Central Institute of Diabetes, Gerhardts Katsch, Karlsburg/GDR.
SO EXPERIMENTAL AND CLINICAL ENDOCRINOLOGY, (1990 Feb) 95 (1) 39-46.
Journal code: 8302802. ISSN: 0232-7384.
CY GERMANY, EAST: German Democratic Republic
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199006
ED Entered STN: 19900706
Last Updated on STN: 19900706
Entered Medline: 19900614

L16 ANSWER 17 OF 37 MEDLINE
AN 90112761 MEDLINE
DN 90112761 PubMed ID: 2514284
TI Effect of administered human growth hormone on protein metabolism in septic rats.
AU Okamura K; Okuma T; Tabira Y; Miyauchi Y
CS Kumamoto University Medical School, Japan.
SO JPEN. JOURNAL OF PARENTERAL AND ENTERAL NUTRITION, (1989 Sep-Oct) 13 (5) 450-4. Ref: 37
Journal code: 7804134. ISSN: 0148-6071.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English

FS Priority Journals
EM 199002
ED Entered STN: 19900328
Last Updated on STN: 19900328
Entered Medline: 19900220

L16 ANSWER 18 OF 37 MEDLINE
AN 90086636 MEDLINE
DN 90086636 PubMed ID: 2596425
TI Metabolic effects of a single administration of growth hormone on lipid and carbohydrate metabolism in normal-weight and obese subjects.
AU Seng G; Galgoti C; Louisy P; Toussain P; Drouin P; Debry G
CS Nutrition Department, University of Nancy I, France.
SO AMERICAN JOURNAL OF CLINICAL NUTRITION, (1989 Dec) 50 (6) 1348-54.
Journal code: 0376027. ISSN: 0002-9165.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199001
ED Entered STN: 19900328
Last Updated on STN: 19990129
Entered Medline: 19900116

L16 ANSWER 19 OF 37 MEDLINE
AN 89360358 MEDLINE
DN 89360358 PubMed ID: 2768759
TI Human growth hormone stimulates liver regeneration in rats.
AU Asakawa K; Hizuka N; Takano K; Horikawa R; Sukegawa I; Toyoda C; Shizume K
CS Department of Medicine, Tokyo Women's Medical College and Research Laboratory, Japan.
SO JOURNAL OF ENDOCRINOLOGICAL INVESTIGATION, (1989 May) 12 (5) 343-7.
Journal code: 7806594. ISSN: 0391-4097.
CY Italy
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198909
ED Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890922

L16 ANSWER 20 OF 37 MEDLINE
AN 89235557 MEDLINE
DN 89235557 PubMed ID: 2715756
TI Measurement of human growth hormone in urine: development and validation of a sensitive and specific assay.
AU Hourd P; Edwards R
CS North East Thames Region Immunoassay Unit (NETRIA), St Bartholomew's Hospital, London.
SO JOURNAL OF ENDOCRINOLOGY, (1989 Apr) 121 (1) 167-75.
Journal code: 0375363. ISSN: 0022-0795.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198906
ED Entered STN: 19900306
Last Updated on STN: 19900306
Entered Medline: 19890615

L16 ANSWER 21 OF 37 MEDLINE
AN 89184277 MEDLINE
DN 89184277 PubMed ID: 3237645
TI Isolation of four isomers of the 20,000 dalton variant of human pituitary growth hormone.
AU Brostedt P; Roos P
CS Department of Biochemistry, University of Uppsala, Sweden.
SO PREPARATIVE BIOCHEMISTRY, (1988) 18 (3) 277-91.
Journal code: 1276634. ISSN: 0032-7484.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals

EM 198905
ED Entered STN: 19900306
Last Updated on STN: 19900306
Entered Medline: 19890501

L16 ANSWER 22 OF 37 MEDLINE
AN 89143124 MEDLINE
DN 89143124 PubMed ID: 2645501
TI ***Urea*** synthesis, nitrogen balance, and glucose turnover in
growth-hormone-deficient children before and after growth hormone
administration.
AU Dahms W T; Owens R P; Kalhan S C; Kerr D S; Danish R K
CS Department of Pediatrics, Rainbow Babies and Childrens Hospital,
Cleveland, OH 44106.
NC AM-25596 (NIADDK)
HD-11089 (NICHD)
M01 RR-80 (NCRR)
SO METABOLISM: CLINICAL AND EXPERIMENTAL, (1989 Mar) 38 (3) 197-203.
Journal code: 0375267. ISSN: 0026-0495.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198904
ED Entered STN: 19900306
Last Updated on STN: 19970203
Entered Medline: 19890404

L16 ANSWER 23 OF 37 MEDLINE
AN 89025162 MEDLINE
DN 89025162 PubMed ID: 3178489
TI Insulinlike growth factor 1 production is inhibited in human sepsis.
AU Dahn M S; Lange M P; Jacobs L A
CS Surgical Service, Veterans Administration Medical Center, Allen Park,
Mich.
SO ARCHIVES OF SURGERY, (1988 Nov) 123 (11) 1409-14.
Journal code: 9716528. ISSN: 0004-0010.
CY United States
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 198811
ED Entered STN: 19900308
Last Updated on STN: 19970203
Entered Medline: 19881118

L16 ANSWER 24 OF 37 MEDLINE
AN 88297836 MEDLINE
DN 88297836 PubMed ID: 3403041
TI [Modification of catabolic metabolism in patients with sepsis and
cranio-cerebral injuries by administration of human growth hormone].
Die Beeinflussung des katabolen Stoffwechsels bei septischen Patienten und
Schadel-Hirn-Traumatisierten durch Gabe von humanem Wachstumshormon.
AU Gottardis M; Hackl J M
CS Klinik fur Anästhesie und Allgemeine Intensivmedizin, Universität
Innsbruck, Österreich.
SO INFUSIONSTHERAPIE, (1988 Jun) 15 (3) 112-7.
Journal code: 9001943. ISSN: 1011-6966.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 198809
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880912

L16 ANSWER 25 OF 37 MEDLINE
AN 88268423 MEDLINE
DN 88268423 PubMed ID: 3390001
TI Inactivation of human immunodeficiency virus during human growth hormone
production.
AU Dormont D; Vaslin B; Dubeaux D; Boussin F; Maillard F; Deslys J P
CS Centre de Recherches, Service de Sante des Armees, Clamart, France.

SO ARCHIVES OF VIROLOGY, (1987) 100 (1-2) 135-8.
Journal code: 7506870. ISSN: 0304-8608.
CY Austria
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 198808
ED Entered STN: 19900308
Last Updated on STN: 19980206
Entered Medline: 19880808

L16 ANSWER 26 OF 37 MEDLINE
AN 88197063 MEDLINE
DN 88197063 PubMed ID: 3447943
TI Growth hormone in urine: development of an ultrasensitive assay applicable to plasma and urine.
AU Girard J; Erb T; Pampalone A; Eberle A N; Baumann J B
CS University Children's Hospital, Basel, Switzerland.
SO HORMONE RESEARCH, (1987) 28 (1) 71-80.
Journal code: 0366126. ISSN: 0301-0163.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198805
ED Entered SIN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880527

L16 ANSWER 27 OF 37 MEDLINE
AN 88152169 MEDLINE
DN 88152169 PubMed ID: 3345820
TI Human growth hormone in urine: development of an ultrasensitive radiometric assay.
AU Erb T; Karolyi G; Pampalone A; Eberle A N; Baumann J B; Burgisser E; Girard J
CS University Children's Hospital, Basel, Switzerland.
SO EXPERIENTIA, (1988 Feb 15) 44 (2) 155-7.
Journal code: 0376547. ISSN: 0014-4754.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198804
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880420

L16 ANSWER 28 OF 37 MEDLINE
AN 88133376 MEDLINE
DN 88133376 PubMed ID: 3277594
TI Can potential hazard of Creutzfeldt-Jakob disease infectivity be reduced in the production of human growth hormone? Inactivation experiments with the 263K strain of scrapie. Rapid communication.
AU Pocchiari M; Macchi G; Peano S; Conz A
CS Istituto di Neurologia, Universita Cattolica S. Cuore, Rome, Italy.
SO ARCHIVES OF VIROLOGY, (1988) 98 (1-2) 131-5.
Journal code: 7506870. ISSN: 0304-8608.
CY Austria
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198803
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880302

L16 ANSWER 29 OF 37 MEDLINE
AN 83161554 MEDLINE
DN 83161554 PubMed ID: 6339541
TI The molecular nature of circulating growth hormone in normal and acromegalic man: evidence for a principal and minor monomeric forms.
AU Baumann G; MacCart J G; Amburn K
NC AM-27047 (NIADDK)
RR-05370 (NCRR)
RR-48 (NCRR)

SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1983 May) 56 (5)
946-52.
Journal code: 0375362. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 198305
ED Entered STN: 19900318
Last Updated on STN: 19970203
Entered Medline: 19830527

L16 ANSWER 30 OF 37 MEDLINE
AN 81116355 MEDLINE
DN 81116355 PubMed ID: 7007243
TI [Behavior of the growth hormone in severe cerebral trauma with secondary
injuries of the brain stem. New viewpoints for therapy I].
Verhalten des Wachstumshormons beim schweren Schadel-Hirn-Trauma mit
sekundaren Hirnstammschaden.
AU Hackl J M
SO INFUSIONSTHERAPIE UND KLINISCHE ERNAHRUNG, (1980 Oct) 7 (5) 237-47.
Journal code: 7613112. ISSN: 0378-0791.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 198104
ED Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19810421

L16 ANSWER 31 OF 37 MEDLINE
AN 79194286 MEDLINE
DN 79194286 PubMed ID: 221511
TI Purification and partial characterization of a nonprimate growth hormone
receptor.
AU Waters M J; Friesen H G
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1979 Jul 25) 254 (14) 6815-25.
Journal code: 2985121R. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197909
ED Entered STN: 19900315
Last Updated on STN: 19970203
Entered Medline: 19790901

L16 ANSWER 32 OF 37 MEDLINE
AN 79151327 MEDLINE
DN 79151327 PubMed ID: 429482
TI Comparative potency of subtilisin-cleaved and intact human growth hormone
measured in growth hormone-deficient human subjects.
AU Bunner D L; Lewis U J; Vanderlaan W P
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1979 Feb) 48 (2) 293-6.
Journal code: 0375362. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197906
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790626

L16 ANSWER 33 OF 37 MEDLINE
AN 79127084 MEDLINE
DN 79127084 PubMed ID: 84749
TI An immunological approach to the study of protein conformational
heterogeneity: its application to growth hormone.
AU Benveniste R; Frohman L A
SO ENDOCRINOLOGY, (1978 Jan) 102 (1) 198-209.
Journal code: 0375040. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Abridged Index Medicus Journals; Priority Journals
EM 197905
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790523

L16 ANSWER 34 OF 37 MEDLINE
AN 77183207 MEDLINE
DN 77183207 PubMed ID: 140746
TI [Molecular forms of human growth hormone (***HGH***) secreted by cultured fetal pituitary cells].
Formes moléculaires de l'hormone de croissance humaine (***HGH***) secretees par des cellules hypophysaires foetales en culture.
AU Lasbennes A; Belleville F; Paysant P; Nabet P
SO COMPTES RENDUS DES SEANCES DE LA SOCIETE DE BIOLOGIE ET DE SES FILIALES, (1976) 170 (6) 1263-9.
Journal code: 7505439. ISSN: 0037-9026.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA French
FS Priority Journals
EM 197707
ED Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19770718

L16 ANSWER 35 OF 37 MEDLINE
AN 75214374 MEDLINE
DN 75214374 PubMed ID: 1152091
TI Alterations in hypothalamic function following thermal injury.
AU Wilmore D W; Orcutt T W; Mason A D Jr; Pruitt B A
SO JOURNAL OF TRAUMA, (1975 Aug) 15 (8) 697-703.
Journal code: 0376373. ISSN: 0022-5282.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197511
ED Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19751106

L16 ANSWER 36 OF 37 MEDLINE
AN 67021259 MEDLINE
DN 67021259 PubMed ID: 5921153
TI Comparative effect of animal prolactins and human growth hormone (***HGH***) in hypopituitary children.
AU Blizzard R M; Drash A L; Jenkins M E; Spaulding J S; Glick A; Weldon V V; Powell G F; Raiti S
SO JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1966 Aug) 26 (8) 852-8.
Journal code: 0375362. ISSN: 0021-972X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 196701
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19670108

L16 ANSWER 37 OF 37 MEDLINE
AN 65076293 MEDLINE
DN 65076293
TI STUDIES WITH HUMAN GROWTH HORMONE (***HGH***).
AU WRIGHT J C; BRASEL J A; ACETOT J R; FINKELSTEIN J W; KENNY F M; SPAULDING J S; BLIZZARD R M
SO AMERICAN JOURNAL OF MEDICINE, (1965 APR) 38 499-516.
ISSN: 0002-9343.
CY United States
DT Journal
LA English
FS OLDMEDLINE
EM 196506
ED Entered STN: 19990716
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32 FILES SEARCHED...
L17 679 INTRAMOLECULAR CHAPERONE

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MEDICONF, NUTRACEUT, PHAR, PHARMAML, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L17
L18 178 DUP REM L17 (501 DUPLICATES REMOVED)

=> S L18 AND insulin
20 FILES SEARCHED...
40 FILES SEARCHED...
L19 12 L18 AND INSULIN

=> D L19 1-12

L19 ANSWER 1 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2002:469830 BIOSIS
DN PREV200200469830
TI Acidic residues on the N-terminus of proinsulin C-peptide are important
for the folding of ***insulin*** precursor.
AU Chen, Li-Ming; Yang, Xing-wen; Tang, Jian-Guo (1)
CS (1) National Laboratory of Protein Engineering and Plant Genetic
Engineering College of Life Sciences, Peking University, 100871, Beijing:
lxzyx@pku.edu.cn China
SO Journal of Biochemistry (Tokyo), (Jun., 2002) vol. 131, No. 6, pp.
855-859. print.

DT Article
LA English

L19 ANSWER 2 OF 12 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2000-01038 BIOTECHDS
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** ; human somatotropin and ***insulin*** precursor fusion protein production
AU Gan Zhongru
PA Tonghua-Gantech-Biotechnology
LO Tonghua City, People's Republic of China.
PI WO 9950302 7 Oct 1999
AI WO 1998-CN52 31 Mar 1998
PRAI WO 1998-CN52 31 Mar 1998
DT Patent
LA English
OS WPI: 1999-610839 [52]

L19 ANSWER 3 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42861 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -
IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 4 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42860 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -
IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 5 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42859 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -
IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 6 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42858 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -
IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 7 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42857 peptide DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -

IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 8 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42856 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -

IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 9 OF 12 DGENE (C) 2003 THOMSON DERWENT
AN AAY42855 protein DGENE
TI New chimeric proteins containing human growth hormone fragment, used particularly for the production of human ***insulin*** -

IN Gan Z
PA (TONG-N) TONGHUA GANTECH BIOTECHNOLOGY LTD.
PI WO 9950302 A1 19991007 46p
AI WO 1998-CN52 19980331
PRAI WO 1998-CN52 19980331
DT Patent
LA English
OS 1999-610839 [52]

L19 ANSWER 10 OF 12 IFIPAT COPYRIGHT 2003 IFI
AN 10221005 IFIPAT;IFIUDB;IFICDB
TI CHIMERIC PROTEIN CONTAINING AN ***INTRAMOLECULAR*** ***CHAPERONE***
-LIKE SEQUENCE

IN Gan Zhong-Ru (CN)
PA Tonghua GanTech Biotechnology Ltd CN
PI US 2002164712 A1 20021107
AI US 2002-54873 20020122
RLI US 2000-423100 20001211 CONTINUATION PENDING
WO 1998-CN52 19980331 Section 371 PCT Filing UNKNOWN
FI US 2002164712 20021107
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION

CLMN 77

GI 2 Figure(s).

FIGS. 1A and 1B. Structure of proinsulin and mature ***insulin*** with correctly formed disulfide bridges. 1A depicts the structure of proinsulin. 1B depicts the structure of mature ***insulin*** with correctly formed disulfide bridges.

FIG. 2. Map of the hGH-mini-proinsulin (SEQ ID NO: 6) expression vector (pZRhi-1).

L19 ANSWER 11 OF 12 USPATFULL
AN 2002:338194 USPATFULL
TI Oligomeric chaperone proteins
IN Hill, Fergal Conan, Les Martres de Veyre, FRANCE
Chatellier, Jean, Les Martres de Veyre, FRANCE
Fersht, Alan Roy, Cambridge, UNITED KINGDOM
PI US 2002193564 A1 20021219
AI US 2001-7314 A1 20011108 (10)
RLI Continuation-in-part of Ser. No. WO 2000-GB1822, filed on 12 May 2000, UNKNOWN
PRAI GB 1999-11298 19990514
GB 1999-30530 19991223
DT Utility
FS APPLICATION
LN.CNT 2196
INCL INCLM: 530/350.000
INCLS: 435/235.100
NCL NCLM: 530/350.000

IC NCLS: 435/235.100

[7]

ICM: C07K014-005

ICS: C12N007-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 12 OF 12 USPATFULL

AN 1998:17192 USPATFULL

TI Protein activation

IN Inouye, Masayori, Bridgewater, NJ, United States

PA University of Medicine and Dentistry of New Jersey, Newark, NJ, United States (U.S. corporation)

PI US 5719021 19980217

AI US 1992-923260 19920731 (7)

RLI Continuation-in-part of Ser. No. US 1989-346552, filed on 2 May 1989, now patented, Pat. No. US 5191063

DT Utility

FS Granted

LN.CNT 1783

INCL INCLM: 435/006.000

NCL NCLM: 435/006.000

IC [6]

ICM: C12Q011-68

ICS: C12P021-00; C12N009-96; C07K014-435

EXF 435/6; 435/68.1; 435/69.1; 435/183; 435/188; 530/324; 530/345; 530/350; 530/402; 530/427

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